

ial

Issues in Applied Linguistics

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SPECIAL ISSUE

SOCIALIZATION THROUGH LANGUAGE AND INTERACTION

Elinor Ochs, Guest Editor

The Constitution of Expert-Novice in Scientific Discourse

Sally Jacoby and Patrick Gonzales

Counselor and Student at Talk: A Case Study

Agnes Weiyun He and Elizabeth Keating

Evidentiality and Politeness in Japanese

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Attention-Getting Strategies of Deaf Children at the Dinner Table

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Scientists' Orientation to an Experimental Apparatus in Their Interaction in a Chemistry Lab

Maria M. Egbert

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Now We Are Two

1

Each individual has acquired a language in the course of complex social interactions with people who vary in the ways in which they speak and interpret what they hear and in the internal representations that underlie their use of language.

Noam Chomsky
Knowledge of Language

The study of "language use" is a rather vague umbrella term covering a multitude of methodological and theoretical approaches to the analysis of discourse, both spoken and written. For centuries, long before the advent of "textlinguistics," written discourse has been the central object of study in the fields of literature and rhetoric. Though I am grossly oversimplifying here, the former examines texts as self-contained artistic creations or as instances of particular historical genres, while the latter investigates texts as well-structured vehicles for the explicitly and implicitly persuasive packaging of ideas. The object of the study of discourse in this tradition has been to learn about aspects of the structure, meaning, and reception of planned and artfully crafted discourse.

Within applied linguistics, a large portion of spoken and written discourse analysis research has been undertaken to answer classic questions which linguists and applied linguists have long concerned themselves with: e.g., What can be learned about Language X (or an interlanguage, or language in general) as a self-contained system of structure and meaning-making? What are the form-function meanings of a particular structure or lexical entity as it is used in actual discourse? How is language (or a particular language) organized beyond the boundary of the sentence? How are texts of all kinds coherently structured? In this approach to discourse analysis there is a kind of inward directionality focused on

the *language* half of the term "language use": the object of the study of discourse is to learn about language and the textuality of language and genre as a system.

In contrast, the relatively recent study of human communication, in such fields as anthropology, sociology, and communication studies, has brought to the study of language use a view of discourse, whether spoken or written, as a display of and accompaniment to the situated social and cultural organization of human life and of particular human lives in particular settings. Audio and video technology have especially had an impact on this approach to discourse, for analysts have been made aware that people communicate not only through language, but also through activity and non-linguistic, yet systematically organized, behaviors such as gaze, gesture, facial expression, body position, pauses, and laughter. The study of situated communication and interaction (whether in classrooms, workplaces, or laboratories, for example), has also revealed that spoken and written modes of communication are intertwined, co-constructed, and modified by participants in complex ways--ways that linguists and philosophers of language could never imagine or intuit from decontextualized sentences. The kinds of questions asked in sociocultural discourse analysis include: How does language use reflect, constitute, reproduce, and challenge the social order of a particular setting? How are particular cultural values encoded and constituted by Language X and thus acquired by the users of Language X? What kinds of communication go on in particular settings and how is this communicative behavior organized by the participants? What are the social implications of communicative behaviors and how do people use language to achieve social and interpersonal goals? How do discourse and communication in particular contexts differ cross-culturally? In such questions there is a kind of outward directionality focused on the *use* half of the term "language use": the object of the study of discourse is to learn about language *in* use as a part of human social and cultural life.

The issue for applied linguistics, it seems to me, is not to decide which of these two main approaches to the study of discourse is right and which wrong. The challenge is to examine the assumptions which underly both of these approaches and to ask ourselves not only to what extent language as a system can be adequately studied as an entity separate from social and cultural life but also to what extent communication in social and cultural life can be studied as an entity separate from language as a system.

2

The leisure and the fearful time
Cuts off the ceremonious vows of love
And ample interchange of sweet discourse
Which so long sund'red friends should dwell upon.

William Shakespeare
Richard III, V: iii: 97-100

Last winter, Elinor Ochs, the most recent addition to the faculty of UCLA's Department of TESL & Applied Linguistics, approached the editorial board of *IAL* with a proposition: to guest edit a thematic issue that would feature the work of UCLA graduate students from her language socialization seminar and give center stage, in an applied linguistics journal, to interdisciplinary data-based investigations of language use. After much deliberation, the editors worked out detailed guidelines for the guest editor, the seminar participants, and themselves. Each of the five papers written at the end of the seminar were revised twice after being closely read and critiqued by Elinor Ochs and at least two appropriate readers, from within and outside UCLA and from within and outside the area of language socialization. When the manuscripts were ready for copyediting, they were put through *IAL*'s regular pre-publication preparation process.

The five main articles in this special issue, all authored by graduate students from applied linguistics and anthropology at UCLA, represent the different emphases in discourse analysis and language use discussed earlier. They focus on audio- or video-recorded situated interaction in different everyday, institutional, and linguistic settings, but they are variously informed by, inter alia, activity theory, conversation analysis, ethnography, systemic linguistics, functional grammar, and, of course, language socialization. The editors thank Elinor Ochs for her hard work and patience throughout this long process of putting the special issue together and for her introductory remarks which follow this editorial.

In addition to the main articles, we also feature Alastair Pennycook's response to Barry Kanpol who, in Volume 1, Number 2, critiqued the essay which Pennycook contributed to our first issue. The exchange between Pennycook and Kanpol concerning

postmodernism and applied linguistics has been a fascinating dialogue about assumptions and ideologies underlying theory, practice, and research in our field, as well as about the sorts of directions applied linguistics might take in the coming years.

Finally, John Povey reports on three international conferences in Africa which dealt with a range of issues relevant to language use, language maintenance, and language planning in particular multilingual geopolitical contexts: a meeting on "Language Ecology in Africa" in Namibia, a workshop-style conference entitled "Democratic Approaches to Language Planning" South Africa, and a conference on "The Creative Use of Language in a Multilingual Society" in Kenya.

3

Women and men (both dong and ding)
summer autumn winter spring
reaped their sowing and went their came
sun moon stars rain

e. e. cummings
"anyone lived in a pretty how town"

This second number of Volume 2 comes just over two years since *Issues in Applied Linguistics* was first organized. Back in the fall of 1989 there was a kind of quixotic excitement in answering Antony Kunnan's call to start an issues-based journal from scratch that would be managed entirely by graduate students in applied linguistics. Having served under Antony's editorship as assistant editor, I was officially appointed Editor last June. The journal has survived this change in its leadership, and a number of graduate students who were not among the original founding group have joined the editorial staff.

It seems that *IAL* is gradually taking its place in the printscape of our field. Many institutional libraries in Asia, Europe, and North America now have standing subscriptions to our journal. *IAL* advertises on electronic networks and in other professional journals and newsletters and was invited to participate in the TESOL conference editors' meetings as of last spring. Articles which

appear in *IAL* are abstracted in Linguistics and Language Behavior Abstracts and electronically indexed on Comserve.

The challenges for my tenure of editorship include increasing the visibility and circulation of the journal, encouraging more submissions, exchanges, special features, and thematic issues, and ensuring continuity by helping to groom a new generation of graduate student editors to take over the management of the journal from those who founded it. The editors who launched the journal feel proud to have "reaped our sowing," not as a one-shot enterprise, but as two volumes and four issues over two years. Now it is upon us to keep the journal going, growing, and, hopefully, interesting.

December, 1991

Sally Jacoby

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Sally Jacoby is a Ph.D. student in the Department of TESL & Applied Linguistics at UCLA. She holds a B.S. in Speech/Theatre from Northwestern University, a B.A. in English from Tel Aviv University, and an M.A. in Applied Linguistics from the University of Birmingham (U.K.). In all of her incarnations--as an actress, translator, ESP/EAP instructor and course developer, analyst of literature, research writing, and interaction--she has remained steadfast in her interest in discourse as both the achievement and reflection of what it means to be communicatively human.

Socialization through Language and Interaction: A Theoretical Introduction

Elinor Ochs

University of California, Los Angeles

Socialization is the process whereby novices gain knowledge and skills relevant to membership in a social group. This process is realized largely through language practices and social interactions that engage novices in a variety of communicative and situational roles. The study of socialization is to a large extent the study of how the social and linguistic organization of such language practices and social interactions bear on the emergence of social and cultural competence.

A species-wide characteristic of human beings is that they may experience socialization across the lifespan. Indeed, societal change may be related to the possibility of lifelong socialization, as each instance of socialization is an opportunity space not only for continuity of tradition but also for transformation in the expected social order and in what counts as knowledge and competence. Because participation in societies demands diverse and complex arenas of competence, members may find themselves relative novices in some arenas even though they are relative experts in others. Members may be more knowledgeable on one topic than another (e.g., politics versus religion, reggae versus jazz), more skillful in one role than another (e.g., administrator versus teacher, experimental physicist versus theoretical physicist), more experienced in one activity than another (e.g., speechmaking versus essay writing, litigating a court case versus persuading a child to eat dinner). Of course, being more or less knowledgeable, skillful, and experienced does not necessarily mean that parties to an encounter will necessarily display a stance of expert or novice. In some cases,

as in the university physics laboratory studied by Jacoby & Gonzales (this volume), local social values may place a premium on members' willingness to be a relative novice at a moment's notice given their assumption that knowledge is complex and that facts can be rapidly overturned. This ideal of science is not always adhered to, however, as demonstrated in Egbert's study (this volume) of a chemistry graduate student who uses a variety of gestural and vocal ploys to resist his colleague's attempts to define him as novice. In still other cases, social expectations may discourage the display of expertise. For example, in the academic counseling encounter analyzed by He & Keating (this volume), a counselor often withholds knowledge about which academic path to pursue given an institutional ideology that it is best not to 'advise' but rather to simply 'inform' the student of existing options. Withholding expertise is also characteristic of the Japanese interactions analyzed by Ohta (this volume), in which self-effacing and deferential displays of uncertainty characterize the speech of professional and knowledgeable women interacting with a male colleague-supervisor.

An important tenet of socialization research is that certain language practices and social interactions involving novices are organized in similar ways no matter what the social group observed. For example, in all social groups, novices carry out complex tasks with more expert members, which they cannot carry out alone (Vygotsky, 1978). Novices coordinate with more expert members to accomplish tasks such as getting the attention of others (McKee, Johnson, & Marbury, this volume), evaluating experimental results (Jacoby & Gonzales, this volume), deciding on an academic major (He & Keating, this volume), and manipulating an apparatus (Egbert, this volume). Expert-novice interactions of this sort provide what Vygotsky calls the "zone of proximal development," a developmental zone in which cognitive skills are interactionally achieved. In Vygotsky's terms, cognition takes place first on the interpersonal level and then on the intrapersonal level. More recently, researchers following this perspective have treated cognition as a "socially situated," "socially distributed," and "socially organized" process which involves persons of varying competencies engaged in an activity (e.g., Bruner, 1986; Engeström, 1987; Hutchins, 1988; Lave & Wenger, 1991). These approaches take as central that the locus of mental processes is not the isolated individual but society. They take a strikingly different theoretical tack from other psychological approaches in that they examine mental process from the point of view of the *activity* taking

place and ask what kind of social actions and cognitive skills constitute that interaction.

This pursuit has led a number of researchers to examine closely how participants in particular activities coordinate their actions or, to put it another way, how particular activities organize the actions of participants. Researchers pursuing socially situated, distributed, and organized cognition examine how social actions and cognitive behaviors are distributed across persons of differing competencies and statuses engaged in an activity (see, for example, McKee, Johnson, & Marbury, this volume, for an analysis of how getting attention in the deaf community is a socially distributed and organized perceptual activity involving those persons wishing to be seen and those who see those wishing to be seen). An outcome of such research is that while there are cross-cultural commonalities in the social and cognitive organization of activities, there are also *local* cultural variations in the organization of activities, and these variations differentially impact the pace, distribution, and nature of the cognitive skills exercised by different members of a society (Leont'ev, 1981; Bruner, 1990; Cicourel, 1989; Scribner & Cole, 1981). In this perspective, activities are media for psychological skills to develop, and persons have opportunities to develop particular psychological skills demanded in particular activities to the extent that they participate in those activities. Social groups may differ in terms of whether or not particular activities take place or whether or not the activities are pervasive or highly restricted in time, place, and participation. Even within a single social group, access to participation in certain activities (e.g., literacy activities, sports activities, work activities) or access to particular actions (e.g., writing, coaching, offering solutions) in these activities may be socially organized. Having local norms, preferences, and expectations about participation in activities means that different members of a social group (e.g., persons differing in age, level of education, native language, ethnicity, gender, occupation) often have different opportunities for the development of higher order psychological skills.

This view of the socialization of knowledge and skills is an open invitation to social scientists involved in the study of human development to closely examine the socially situated and organized interactions of persons of varying competencies. The emphasis in post-structural approaches to socialization is on *speaking* rather than language, on social *acting* rather than social structure, and on *thinking* rather than thought. In current studies of socialization, the

trilogy of *speaking-acting-thinking* has replaced the more structural and Whorfian trilogy of "language-society (or culture)-thought" as an object of inquiry. Instead of an analytic preoccupation with the extent to which children and other novices are being socialized into mental structures that are universal or culturally and linguistically circumscribed, the current preoccupation is with the ways novices and experts jointly act and speak and in so doing involve themselves in ways of thinking. The papers in this volume speak precisely to this call to examine the interactional generation of social and cultural understandings. They emphasize that socialization is a dynamic, synergistic process that is jointly accomplished moment by moment across interactional time. These papers examine the microgenesis (Vygotsky, 1978) of socially and culturally relevant knowledge and skills and display what can be learned about socialization from a micro-analysis of the coordinated employment of vocal and gestural constructions in the course of a routine activity. In this sense, each paper offers a micro-ethnography of a particular community--a physics laboratory, a chemistry laboratory, an academic counseling unit, a staff of Japanese language instructors, a deaf family--as a contribution to a more comprehensive understanding of how people change over interactional time, and, more loftily, how people change over lifetimes, how communities change over generations, and how language practices and social interaction perhaps ultimately impact the evolution of the species.

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Elinor Ochs, Professor of Applied Linguistics at UCLA, holds a Ph.D. in Anthropology from the University of Pennsylvania. Her research has focused on cultural dimensions of conversational discourse and the interface of language acquisition and socialization throughout the life span and across societies, including Madagascar, Western Samoa, Italy, and the USA. Her most recent research deals with the socialization of problem-solving discourse in family dinner settings and in scientific laboratories.

The Constitution of Expert-Novice in Scientific Discourse¹

Sally Jacoby

Patrick Gonzales

University of California, Los Angeles

This paper argues that an examination of expert-novice relationships in unfolding interaction should not proceed from the static and unidirectional view that knowledge and status are distributed as functions of a priori categories such as age, gender, and hierarchical rank. Although analysis of interactional sequences from the group meetings of a university physics team reveals the co-occurrence of professional status and expertise in some segments of the data, we show, through a conversation analytic approach, that the constitution of expert-novice in dynamic interaction is a much more complicated, shifting, moment-by-moment reconstruction of Self and Other, whether within a speaker's talk or between speakers. We demonstrate that the constitution of a participant as expert at any moment in ongoing interaction can also be a simultaneous constitution of some other participant (or participants) as less expert, and that these interactionally achieved identities are only candidate constitutions of Self and Other until some next interactional move either ratifies or rejects them in some way. This way of viewing expert-novice relations can help account not only for the bidirectionality postulated in those models of apprenticeship, socialization, and learning which are based on activity theory but also for change and innovation in communities of practice. The implication for research raised by this study is that the analysis of language use ought to go beyond the extrinsic social, cultural, and biological identities of speakers and recipients; it should include an analysis of how utterances constitute these identities and how utterances are organized despite these identities.

INTRODUCTION

Many models of socialization, of occupational or professional apprenticeship, and of learning in formal and informal contexts have assumed a unidirectional transference of norms, skills, and knowledge from one group or individual to another.

While these groups or individuals may be differentiated by categorical asymmetries such as age, gender, and status, it is the relative asymmetry in competence which has been central to such models of social, cultural, and cognitive reproduction. Perhaps to avoid the evaluative implications of the competent-incompetent dichotomy, certain streams within the social sciences have preferred to view the processes of socialization and learning as metaphorically akin to occupational and professional apprenticeship, in which "experts" initiate "novices" into particular worlds of cultural and social competence. Yet, such a change in imagery has not always brought about a concomitant change in viewing socialization as an essentially unidirectional process.²

In contrast, other research, grounded in activity theory (Vygotsky, 1978; Leont'ev, 1981; Engeström, 1987; Smith, 1990), has stressed that learning is not simply a passive transference of knowledge from the more competent to the less competent. Instead, it is seen as an active and interactive process in which learners or novices increasingly participate in a community of social practice and in which the thinking and identity of competent experts as well as novices are transformed (e.g., Engeström, 1989; Lave & Wenger, 1989; Rogoff et al., 1989; Rogoff, 1990; C. Goodwin, 1991). Such a viewpoint posits learning not as a mental event internal to an individual but as a social achievement within a complex framework of community, goals, tools, and activities. These studies also go beyond activity theory by concretizing apprenticeship in various actual cultural and professional contexts. Moreover, in addition to acknowledging that experts can "expertize" the novices, this research is also better able to account for innovation and change in any community of practice because it has recognized that novices can sometimes affect the experts as well as the community of practice.

Lave & Wenger (1989), for instance, view this interactive dimension in any community of practice as an underlying tension between the reproduction of the community and the displacement of the experts, a tension which is necessarily worked out locally between individual novices and individual experts. For novices not only must learn

to engage in the existing practice, which has developed over time: to understand it, to participate in it, and to become full members of the community in which it exists . . . they have a stake in its development as they begin to establish their own identity in its future. (Lave & Wenger, 1989, pp. 33-34)

This is not to say that all experts view novices as threats, but that some experts may recognize the benefits which can accrue from a naive and inexperienced perspective.³ Such interaction between experts and novices can increase "reflection on ongoing activity" (Lave & Wenger, p. 35) and allow the expression of multiple perspectives. When this view of the "peripheral participation"⁴ of novices in communities of practice is endorsed, even an expert, with a recognized historical status of competence, "can to some degree be considered a 'newcomer' to the future of a changing community" (Lave & Wenger, 1989, p. 35), especially in particular moments of micro-interaction. And thus, the identities of expert and novice are not entirely static; they can also be understood as complex and dynamic constitutions and reconstitutions of Self and Other brought about by and through interaction over time. Nevertheless, the literature on apprenticeship and expert-novice relations has not, in our view, shown in sufficient detail how expertise and novicehood are interactionally achieved.

A similar notion of the gradual development of competence in cultural practice also informs situated studies of child language socialization (e.g., Ochs & Schieffelin, 1984; Schieffelin & Ochs, 1986; Crago, 1988; Ochs, 1988; Cook, 1990; M. Goodwin, 1990; Miller et al., 1990; Schieffelin, 1990; Heath & Chin, forthcoming; Ochs et al., forthcoming). In these studies, language acquisition is seen as the socially achieved outcome of particular and recurring interactional moments between caregivers and children in particular societies. Based as they are on recorded and transcribed interactions, these studies suggest that to learn a language is also to learn a culture, because culture and interaction are the only contexts in which language has meaning. In this view, linguistic knowledge is more than knowledge of the language as a self-contained system; it is knowledge both of how language constitutes and is constituted by culture and of how language constitutes and is constituted by interaction within a culture. Nevertheless, even in these studies, the identified "expert" or "novice" is apparently an ethnographic given due to the obvious differences in cognitive and social development between caretakers and children.⁵ And thus, although many of these caretaker-child studies are based on models of socialization derived from activity theory, they rarely illustrate the bidirectionality of learning which these models assume.

Defining "Expert" and "Novice"

We would argue that viewing expert-novice as a bipolar dichotomy or as some set of relative statuses to which individuals may be assigned fails to capture both the complexity of what it means to "know things" and the dynamic fluidity of expert-novice relations as they are constituted in unfolding interaction. On the one hand, any individual is a particular complex combination of knowledges, perspectives, experiences, and expertises in the general sense of knowing things and knowing how to do things. This complexity may, to some extent, derive from categorical social identities, such as gender, age, education, and rank, but it also comes from an individual's own history of experiences (or lack of them) in previous particular interactions. Any relationship or interaction of individuals thus necessarily involves multiple asymmetries of knowing, which may be invoked in or relevant to a particular situated context.

On the other hand, it is through interaction itself that participants display, whether verbally or non-verbally, the relevance of the differing amounts or kinds of their knowing as well as their assumptions concerning the knowledge of other participants, and these displays (or lack of them) are also what constitute the nature and structure of particular interactions. Indeed, since all talk-in-interaction is oriented to some particular recipient(s) at some particular point in the talk, the distribution of expertise in ongoing talk has to be seen as a jointly constructed achievement between participants (Schegloff, 1989). And thus, while knowledge and social identity for an individual may cognitively derive from the processes of socialization and training as well as experience, their status relative to other participants' knowledge and social identity must be collaboratively achieved as interaction unfolds. For, like all intersubjective meaning, social identities, including "expert" or "novice," in some sense do not exist outside the mind of an individual without an Other to recognize them and ratify their meaning. Thus, even when objective differences in competence among participants obtain, these differences can be seen to be relevant to participants when they are constituted in interaction, and in some moments of interaction an expert may be merely one who is momentarily constituted as "more-knowing" (rather than "all-knowing"), while a novice may be one who is momentarily constituted as "less-knowing" (rather than "not-knowing"). The identification of participants as experts or novices, for our purposes,

is thus a metaphorical labeling of their interactionally achieved asymmetries of knowing; it is not directly or necessarily a function of participants' professional certification or licensure.

To illustrate hypothetically at this point, if a speaker evaluates something a recipient has done, offers advice, or delivers a directive to the recipient, this act is a candidate constitution of the speaker as the one who, at that interactional moment, is knowledgeable enough to evaluate, give advice, or command, and, simultaneously, it is also a candidate constitution of the recipient as the one who, at that interactional moment, is in need of evaluation, advice, or direction.⁶ However, in the very next interactional moment, certain utterances could be produced by either the speaker or the recipient which may or may not ratify the candidate expertise and candidate novicehood presupposed in the speaker's original utterance. The recipient, for instance, may design his or her uptake to reject the speaker's evaluation or to refuse to fulfill the directive. Moreover, the original speaker may modify his or her own utterance as it is being produced (C. Goodwin, 1979; Schegloff, 1979) or as it comes to completion. Similarly, if a speaker asks for information or advice, this act, in that interactional moment, can be a simultaneous candidate constitution of the speaker as less knowing or less competent and the recipient as more knowing or more competent. Whatever occurs in the next moment of interaction will ratify or call into question those candidate identities. In other words, a candidate constitution of an "expert" can simultaneously be a candidate constitution of a "novice" (and vice versa), which requires some next interactional moment in order to be ratified or otherwise challenged.

This is not to say, however, that *every* candidate constitution of an "expert" is *always* a simultaneous candidate constitution of a "novice" in an apprenticeship sense. For instance, a specialist physician participating in a case conference with physicians from other specializations may have her opinion oriented to by the other participating physicians as one of a set of complementary expertises and not as a novice with respect to the other specializations. Although it is true that each specialist knows less about each of the other colleagues' specializations, for purposes of conducting a case conference it is the distributed expertise, and not the gap between expertise and lack of expertise, which is likely to be the most relevant differentiation for the participants in this kind of interaction. In contrast, when this same specialist physician oversees a case conference involving medical students, it is likely that her opinion

will be oriented to by the students as more expert relative to the views of the less competent trainees. Whether an utterance is understood to momentarily constitute a recipient as a novice or as a complementary expert may thus depend on the relevance of particular interactional contexts and particular combinations of participants. But whichever expert/novice or expert/other-expert statuses may be relevant to the participants, the course of talk in any context can always be flexible, contingent, and fluid from moment to moment.⁷

This way of viewing the distribution of expertise is particularly crucial when analyzing peer interactions--interactions among colleagues or team members--who cannot simply be divided into those who know and those who do not know, since they are all people with different specializations and different levels of experience. The constitution of "expert" or "novice" in such contexts is thus potentially an ever-changing distribution of relative knowing which can be reconstituted anew in the moment-by-moment unfolding of interaction.

DATA

To illustrate how the conceptualization of "expert" and "novice" as dynamic and mutual socially constituted interactional achievements differs from traditional unidirectional and status-derived notions of distributed expertise, we shall examine several segments of two different meetings of a university physics research group. Such a group is an interesting focus for the study of expert-novice interactions not only because it is comprised of adults who, whether native or nonnative speakers of English, have sufficient linguistic, cognitive, and professional competence to engage in a physics research team, but also because the members can be ethnographically categorized as falling along an actual professional hierarchy, from principal senior investigator to third-year graduate student.⁸

Our segments are taken from a large database of 26 video-recordings representing approximately 60 hours of face-to-face interaction between members of a physics research team collected over a six-month period.⁹ Three of the sessions are of members performing experiments, but the remaining recordings are of group meetings, normally scheduled once a week, in which the members

come together to report on the progress of their individual and/or collaborative endeavors, to rehearse for upcoming conferences, to discuss professional matters (e.g., job and grant applications, networking, conference news), and to devote a limited amount of time to collaboration and feedback on written documents, such as abstracts, CVs, and co-authored manuscripts. The general format of these meetings is that of an informal roundtable discussion, moderated by the principal investigator, in which participants may make use of a blackboard, overhead projector, and various types of written and graphic documents, whether the meetings take place in a classroom, a conference room, an office, or a laboratory.

The Participants

The members of the group¹⁰ at the time these videotapes were made, included:

- Ron: principal investigator, tenured professor of physics, American male.
- Isabel: post-doctoral fellow, faculty member in the physics department of a European university, Portuguese female.
- Gary: post-doctoral fellow, temporary instructor of physics, Canadian male.
- Jeremy: post-doctoral fellow, temporary instructor of physics, American male.
- Miguel: advanced doctoral candidate, Colombian male.
- Marsha: advanced doctoral candidate, American female.
- Daniel: doctoral student, Hong Kong male

In background interviews the participants emphasized the somewhat extraordinary makeup of this particular research group. They reported that most physics groups are either experimental or theoretical in research orientation, whereas their group is composed of both experimentalists and theorists (Ron, Jeremy, and Isabel are the theorists). They also reported that although it is especially

unusual for a principal investigator who is a theorist to direct experimentalist graduate students, as is the case in this group, having opportunities to interact with theorist/experimentalist counterparts can be stimulating and beneficial to their work. They also remarked that such interaction is congruent with this particular principal investigator's advocacy of greater collaboration between theorists and experimentalists.¹¹

Another aspect of the context worth mentioning is that the group does not work during the week as a single unit of seven collaborators. Rather, members work in isolation and in occasional small collaborative groups of two or three. Although members may schedule additional meetings with the principal investigator, the weekly group meeting functions as the main forum for each individual member to talk to the principal investigator who, during the week, is often occupied with administrative and professional duties on and off campus.

DISCUSSION

A conversation analysis of these meetings reveals that the constitution of expert-novice relations is interactionally achieved in the course of unfolding talk. We shall show that at times the constitution of "expert" and "novice" is consistent with the institutional hierarchical ranking of the participants, while at other times it is not. That is, in certain segments of the talk, the display and constitution of "knowing more" coincides with the distribution of institutional status within the group, while during other parts of the talk, a lower status member is constituted as "more knowing." In addition, we shall show that within the talk of one person and within the talk between interlocutors, the constitution of expert-novice can shift on a moment-by-moment basis as interaction proceeds.

Co-Occurrence of Higher Status and Achieved Expertise

Not surprisingly, in the institutional context of a university scientific research group, many stretches of talk in our transcripts attest to the socialization of junior members by more experienced senior members. In much the same way as in contexts involving caretakers and children, the more senior physicists employ the many

resources of interaction to constitute themselves as experts (and the junior members as novices) by, among other things, issuing directives, asking and answering particular kinds of questions, disagreeing, and evaluating the assertions and performance of others.

In Segment [1], for instance, Ron, the principal investigator, is critiquing a graduate student's (Miguel's) rehearsal of a conference talk, which took place several minutes prior to this segment. The conference talk rehearsal involved the use of overhead transparencies ("viewgraphs"), and several aspects of the rehearsal have already been dealt with by this point in the discussion (see Appendix for transcription conventions):

Segment 1 - RO Lab 10-24-90

- 01 Ron: [Okay. Another thing i:s that when you
02 [((looking and gesturing with glasses at
03 screen; Miguel writing notes))
04 say Fishman an' Aharony and
05 Ca:rdy, [(1.0)
06 [((looks at Miguel))
07 on (the)/(your) viewgraph?
08 Miguel: [Yeah.=
09 [((looks up from writing to transparency
10 on OHP))
11 Ron: =[You've go:t to give (em) a reference.
12 =[((looks at screen))
13 You ca:n't just do: that. ((looks at
14 Miguel))
15 (0.6)
16 Ron: Just [gi:ve a reference to the paper.
17 [((Miguel looks at Ron))

...¹²

18 Ron: [Uh:(.) would you just put down Phys-
19 [((looks at Miguel))
20 Re- uh:: that was uh:: Journal of
21 Physics "C" or whatever and Cardy (I
22 think it's Phys Rev "L"). Okay. Just
23 (.) wr:ite it in.
24 Miguel: [Yeah. °Okay.°
25 [((looks up at screen))

Speaking from his notes scribbled during the rehearsal runthrough, Ron starts off with "Okay. Another thing"--first constituting himself as the one who controls transitions from one discussion to another, then orienting himself to the list of matters he presumably wanted to cover in this feedback session. A second observation is that this new matter is begun while Miguel is still attending to his own writing of notes from the previous comments (line 03). When Ron pauses and finds that Miguel is not gazing at him (line 06) after Ron has moved on to his next point, he works to get Miguel's attention by adding "on (the)/(your) viewgraph?" (line 07) with rising intonation.¹³ This move elicits both a verbal and non-verbal response (lines 08-10) from Miguel through which Miguel displays that he is attending to the new discussion.

Once Miguel's attention is focused on Ron's point, Ron produces a series of directives before and after a short side sequence (see Footnote 12), which explicitly formulate what Ron thinks Miguel ought to do and which implicitly point to what the problem in the talk was that now requires remedy. Ron is constituted as the expert not only by his issuing of fairly blunt directives, but also by his conveying of the professional lesson that oral references to predecessors must be accompanied on a viewgraph by complete written citations visible to an audience. Moreover, that Ron attempts to recall the precise citation sources from memory is also a display of his professional knowledge. Finally, the simultaneous constitution of Ron as "expert" and Miguel as "novice" is supported not only by Ron being the critic of the moment, but also by Miguel not objecting to or countering in any way the criticisms and remedy formulated, which, in effect, ratifies Ron's display of expertise. When Miguel finally does respond, it is an unequivocal display of compliance with the directives ("Yeah. °Okay.°"). And indeed, by the following week's meeting he had added the complete references to his viewgraph.¹⁴

Segment [2] is a more complex example of interactionally constituted expert-novice identities co-occurring with institutional status. Unlike Segment [1], in the following segment, the graduate student (Marsha) interacting with Ron is actively participating in the ongoing talk. Yet, all of her contributions are, in one way or another, rejected as candidate claims to expertise by the principal investigator. Just prior to this segment, Miguel had presented a problem he was having with his experimental data: the procedure he was following was possibly producing an experimental artifact which could render his calculations meaningless in the eyes of other

researchers. The problem led to a great deal of discussion among Miguel, Gary, and Ron, but by this point in the session, Ron and Miguel have, for some time, been the only interlocutors trying to sort out the experimental predicament. What follows is an extended sequence in which, in response to a suggestion made by Marsha, Ron launches into a lengthy explanation of why the problem is inherent in the experimental procedure rather than mere error:

Segment 2 - RO Lab 10-17-90

01 Ron: °I see:..°
 02 (0.2)
 03 Ron: What you're saying is that b over a:
 04 (0.2) oh: dear. That's horrible.
 05 {(0.2)
 06 {(Gary vert[ical headshakes))
 07 {4.0} { [(Isabel looks at Ron))
 08 { [(Marsha's gaze to table))
 09 Marsha: ((to Miguel)) Wu- [you ca- you can't
 10 [(Isabel looks at
 11 Marsha))
 12 find a systematic way to subtract it
 13 out?
 14 (.)
 15 Marsha: And say well: this is an
 16 experimental error what if
 17 [I subtract ((to Ron)) this out?
 18 Ron: [No:.. No [it it's worse
 19 [(horizontal headshake))
 20 than that.
 21 (.)
 22 Ron: Uhm: what he's saying is
 23 now I'm beginning to understand
 24 [(1.7)
 25 [(turns body to Marsha)) Sorry (.)
 26 Miguel. () What he's
 27 sa(h)y(h)ing is that (0.2) this delta
 28 nought, this twenty-six,
 29 Marsha: [Uh huh
 30 [(vertical headshake))
 31 Ron: where does it come from. (0.4)
 32 [It comes from the fact that
 33 [(Marsha vertical headshake))
 34 it takes you (0.2) half a second to heat
 35 up.

36 Marsha: [That's what [establishes your barrier]=
 37 [((vertical headshake))]
 38 Ron: [(That's) [(bu)
 39 Marsha: =It's establishing your b-
 40 Ron: It it gives you an effective barrier
 41 height.
 42 [It has no meaning whatsoever. It's
 43 [((Marsha vertical headshake))
 44 simply [a (0.5) (and) the darn
 45 [((raises hand; points to
 46 board))
 47 thing is going logarithmic in that
 48 ((hand falls to table)) time as well.
 49 (.)
 50 Ron: And so: uh: (0.2) you're alw- it's
 51 always gonna look as though there's a
 52 delta nought present.
 53 (0.2)
 54 Ron: ((to Miguel)) Just because of the way
 55 you do the experiment.
 56 (.)
 57 Ron: And there's no (0.2) experimental way to
 58 do any better.
 59 (0.2)
 60 Ron: And so you're really stuck.
 61 [and you can't get down
 62 Marsha: [and you can't just say: [this is a
 63 [((does
 64 "removal" motion with hand))
 65 certain amount of aging
 66 [in my spin glass I'm going to subtract
 67 [((Ron looks at Marsha))
 68 this out somehow.
 69 Ron: Well: if you (heh) (heh) that takes a lot
 70 of faith.

As Segment [2] is rather lengthy, for the convenience of the reader, we shall proceed with our analysis by redisplaying particular portions of the interaction as we go along. We begin here with lines 01-21 for which the reader is requested to refer to the display above.

Ron's claim to understanding (line 01) is followed by a brief pause (line 02) during which no one else joins in the talk, which suggests that the other members are still oriented to being present overhearers rather than active participants in the ongoing discussion. However, when Ron abandons his candidate reformulation of

Miguel's problem for a negative assessment of the predicament (lines 03-04), Gary, Isabel, and Marsha display different reactions to the long silence which ensues (4.0 seconds). Gary, the earliest to react, aligns himself with Ron's assessment through repeated vertical headshakes (line 06); Isabel, after a slight delay, looks at Ron (line 07); Marsha shifts her gaze from Ron to the table (line 08) and self-selects in order to propose a solution directly to Miguel (lines 09-13). Unlike Gary and Isabel, Marsha orients to this pause as an opportunity space for her to become an active co-participant in what was previously a discussion between Ron and Miguel, by posing a question which suggests a possible solution to the problem that a moment ago both the principal investigator and the graduate student in charge of the experiment found insurmountable.

When no response is forthcoming from Miguel (line 14), Marsha appears to orient to his micropause as a signal that more elaboration is necessary, although she might have also chosen to understand his hesitation as a signal of negative stance toward her solution (Pomerantz, 1984b). But as Marsha is appending her elaboration (lines 15-17), Ron interrupts with a rejection ("No:. No") which draws Marsha's gaze (lines 17-18) followed by an assessment ("it it's worse than that."), which implies that while her suggestion is, in principle, the right sort of solution, it is insufficient for the magnitude of Miguel's problem (lines 18-20). Ron's move embodies a stance as an expert capable of evaluating the extent to which a graduate student (Marsha) not directly involved with Miguel's line of inquiry has understood the crux of Miguel's experimental problem.

Segment [2 - Excerpt] - RO Lab 10-17-90

22 Ron: Uhm: what he's saying is
 23 now I'm beginning to understand
 24 [(1.7)
 25 [((turns body to Marsha)) Sorry (.)
 26 Miguel. () What he's
 27 sa(h)y(h)ing is that (0.2) this delta
 28 nought,¹⁵ this twenty-six,
 29 Marsha: [Uh huh
 30 [((vertical headshake))
 31 Ron: where does it come from. (0.4)
 32 [It comes from the fact that
 33 [((Marsha vertical headshake))

34 it takes you (0.2) half a second to heat
 35 up.
 36 Marsha: [That's what [establishes your barrier]=
 37 [((vertical headshake))]
 38 Ron: [(That's) [(bu)
 39 Marsha: =It's establishing your b-
 40 Ron: It it gives you an effective barrier
 41 height.¹⁶

As a way of leading Marsha through a detailed talking through of Miguel's problem, Ron reformulates Miguel's problem (line 22, but previously begun and abandoned at line 03), though now he directs it to Marsha as a correction of her misunderstanding rather than as a confirmation check of his own understanding. Although Ron's reformulation at line 22 is given up momentarily in mid-production to express his own delayed understanding (line 23), Ron repositions his body away from the direction of Miguel and the blackboard to directly face Marsha (lines 24-26).

Restarting his reformulation of Miguel's point (lines 26-28), Ron substitutes the theoretical assigned formula term ("delta nought"¹⁶) with the precise experimental measurement in Miguel's data that is causing the trouble ("twenty-six"), a replacement which manages to elicit from Marsha a display that she has followed Ron's talk thus far (lines 29-30). But instead of continuing the pseudo-cleft construction which he resumed at line 26, Ron poses a question ("where does it come from.") whose answer (lines 32-35) had already been given by Miguel in the discussion prior to this segment. At the hearable completion (both syntactic and intonational) of this question-answer sequence (line 35), Ron and Marsha engage in a competition to gain the floor (lines 36-41), which Ron eventually wins by slightly reformulating Marsha's candidate understanding of the upshot of his point.

Segment [2 - Excerpt] - RO Lab 10-17-90

42 Ron: [It has no meaning whatsoever. It's
 43 [*((Marsha vertical headshake))*
 44 simply [a (0.5) (and) the darn
 45 [*((raises hand; points to*
 46 *board))*
 47 thing is going logarithmic in that
 48 [*((hand falls to table))* time as well.
 49 (.)
 50 Ron: And so: uh: (0.2) you're alw- it's

51 always gonna look as though there's a
52 delta nought present.
53 (0.2)
54 Ron: ((to Miguel)) Just because of the way
55 you do the experiment.
56 (.)
57 Ron: And there's no (0.2) experimental way to
58 do any better.
59 (0.2)
60 Ron: And so you're really stuck.
61 [and you can't get down

quantity as "a certain amount of aging in my spin glass."¹⁷ This rewording of her suggestion appears to be oriented to an understanding that Ron objected to calling Miguel's problem an experimental "error." And thus, Marsha's modified suggestion displays that Ron's more expert objection, elaboration, and clarification have affected the formulation of her candidate remedy to the problem, although she has not given up the fundamental solution of subtracting out the problematic quantity. Ron's initial response (lines 69-70) to Marsha's modified suggestion is not as bluntly rejective as his response was in lines 18-20, but it does display his uneasiness with the leap of "faith" required to support such a solution. Not only does he begin his response with a slightly stretched "Well:"--a typical preface to a dispreferred response (Pomerantz, 1984a; Sacks, 1987)--he aborts a hypothetical utterance ("if you") and accompanies the indirectly negative assessment of Marsha's suggestion with laughter.

In this sequence, Marsha has not succeeded in getting her claims to candidate expertise ratified by either Miguel or Ron. Ron's assessments, disagreements, and extended explanations have constituted Marsha's candidate suggestions and understandings as less expert proposals, while constituting Ron, the principal investigator in this interaction, as more expert.

Segments [1] and [2], then, essentially illustrate how Ron's publicly known and historically recognized status as principal investigator and professor of physics is maintained through the interactional displays and orientations of the various participants. Whether more junior members of the group listen in silence and acquiesce (as in Segment [1]) or attempt to display their candidate expertise (as in Segment [2]), Ron's directives, assessments, rejections, and frequent self-selections at points of turn completion, as well as the participants' orientation to these interactional moves, in these two segments at least, all help to ratify his higher-status roles of group leader and professional expert.

Achieved Expertise Despite Lower Status

The previous two segments illustrated the co-occurrence of expertise and professional/institutional hierarchy in adult peer interaction; specifically, they showed the principal investigator being constituted as more knowing, when, for instance, critiquing conference talk rehearsals or the problem-solving suggestions of graduate students. But as was argued earlier, given the individual

expertises represented by the members of this group, the co-occurrence of expertise and rank in the previous examples may be less a factor of pre-assigned hierarchy and more a factor of Ron's particular expertise lying in certain knowledge domains--how to give a paper, for example, how to ascertain what is problematic, or how to evaluate a proposed solution to a particular experimental problem. Indded, the next two segments illustrate instances in which the lower ranking members of the group are constituted as "experts" because of their particular expertise in certain knowledge domains. This is not surprising if we consider that each member of the group is a specialist in his or her own work regardless of professional seniority. Indeed, as Lave & Wenger (1989) have pointed out, for a community of practice to reproduce itself, it is imperative that "newcomers" develop sufficient original expertise to eventually overtake and replace the "oldtimers."

Segment [3] comes from a subsequent part of the same rehearsal critique from which Segment [1] was taken. Between these segments, Ron, the principal investigator, faulted Miguel (a graduate student) for failing to reference important previous work in his talk. He pointed out in that intervening sequence that this lack of referencing makes it impossible to distinguish between what other particular predecessors (e.g., Birgeneau) have done and what Miguel is reporting to have done.¹⁸ Following a brief pause in which no response is forthcoming from Miguel, the following sequence occurs:

Segment 3 - RO Lab 10-24-90

01 Ron: For example, did Birgeneau see this
 02 effect?
 03 (.)
 04 Ron: The [d M d Tee:? ((i.e., $\partial M/\partial T^{19}$)
 05 [((Ron points to screen))
 06 [((Miguel looks at screen))
 07 ((Daniel raises body up from table))
 08 (0.8)
 09 Miguel: No. Nobody has seen d M d T.
 10 People have see:n birefringence,²⁰

Perhaps to elicit some sort of response from Miguel at this point, Ron formulates a yes-no question (lines 01-04) aimed at clarifying what one of the previously named predecessors may or may not have seen. It appears that this is a genuine question since

Birgeneau is an experimentalist who heads an experimentalist research group and Ron, being a theorist, may be less familiar with the literature on experimentation than Miguel. Moreover, following Miguel's answer (line 09), there is no teacher-like uptake²¹ such as 'right' or 'no' on Ron's part; instead Miguel carries on detailing what other experimental groups have seen besides the "d M d T" effect (line 10).²² Although Ron had previously been constituted as an expert in the public presentation of research findings (see Segment [1]), by asking this particular question of Miguel ("did Birgeneau see this effect?") he is now, in this interactional moment, constituted as a "novice" and Miguel as an "expert" in the knowledge domain of the history of previous experimentation.

When Miguel finally answers Ron (line 09), after having looked at the screen on which the d M d T effect is projected (line 06), his answer is composed of two parts: a response to the question about Birgeneau ("No.") and an assertion oriented to Ron's earlier criticism that Miguel had not clearly delineated his new findings from the work of predecessors ("Nobody has seen d M d T"). By saying that "Nobody has seen d M d T." Miguel, in one utterance, has constituted his findings as unique in the field. And thus, despite his graduate student status and his advisor's ongoing critique of the presentation, Miguel is constituted as an expert in this interaction by answering Ron's question with absolute certainty, by characterizing his findings as unique, and by not being challenged any further on this particular point.

A similar sequence occurs soon after the same discussion from which Segment [2] comes. In this segment (Segment [4]), Ron is again voicing his assessment of Miguel's experimental predicament, that due to the artifact produced by the experimental procedure, his findings have no real physical meaning and cannot be reputably reported. However, he formulates this assessment as a candidate understanding of the problem, which Miguel eventually confirms:

Segment 4 - RO Lab 10-17-90

01 Ron: So we're out of business. So (.) what
 02 you're telling me then is [if=
 03 [((looks at
 04 Gary))
 05 =[I ask [Gary and Daniel to=
 06 [((gestures to Gary))
 07 Marsha: [(s:)

08 Ron: =measure at point nine nine [T g,²³
09 [((looks back
10 to Miguel))
11 (0.5)
12 Miguel: >I don't think you will< get [teh::
13 Ron: [you won't get
14 anything.
15 (0.5)
16 Miguel: No- nothing particular(lar)ly interesting.

Ron's first turn in this segment consists of two parts (lines 01-08). The first part is a display of what he understands to be the upshot of Miguel's problem ("So we're out of business."), which is similar to the conclusion he came to in Segment [2] ("and so you're really stuck.") except that now Ron expresses the problem as a team problem ("we") rather than as an individual problem for Miguel ("you"). The second part begins with the same upshot marker ("So") as the first part, but differs in that Ron now formulates his talk as a candidate understanding of what Miguel was previously implying ("what you're telling me then is"). The candidate understanding is formulated as an if/then construction, with Ron producing only the "if" clause before pausing after a continuing intonation (line 11). This designed incompleteness, momentary hesitation, and gaze toward Miguel invite Miguel to collaborate in the completion of the thought, which he does (line 12).²⁴ Although Ron is obviously in mid-thought and displays a candidate constitution of himself as the one who would "ask Gary and Daniel" to perform the experiment, Miguel at this point collaborates in the prediction of what the results of the experiment would be, a move which seemingly brings Miguel's expertise on a par with Ron's.

The completion of the if/then structure (lines 12-14) is achieved, however, in a somewhat complex interactional manner. Miguel begins to deliver his experimental prediction (the "then" part of the if/then structure), but just prior to possible completion of his utterance, Ron intervenes in Miguel's attempted collaboration (lines 13-14) by overlapping and slightly reformulating Miguel's by then projectable answer, adding the upshot "anything." After a slight pause (line 15), Miguel agrees ("No-") with Ron's syntactically negative assertion ("you won't get anything.") but then corrects Ron's candidate understanding of the predicted results by envisaging them as not "particular(lar)ly interesting." In this sequence Miguel has been constituted as someone in a position to project the results of particular experimental methods for the team's

research enterprise, despite their having been proposed by the principal investigator. And Ron, on his part, has been constituted as someone whose understanding has been guided and confirmed by Miguel, his experimentalist graduate student.

Segments [3] and [4] have illustrated how displays of expertise can be constituted in ongoing interaction regardless of pre-assigned institutional or professional hierarchical rank. It is not just that experts display expertise, but that this candidate expertise must be ratified in some way by other participants who are interactionally constituted as less knowing in some sense, an asymmetry which is likely to obtain, given the distributed knowledges, perspectives, experiences, and expertises within the group. Moreover, the analysis of Segments [1] through [4] not only supports the notion that being constituted as more knowing or less knowing is a potentially shifting interactional achievement to which participants are oriented as interaction unfolds, it also suggests that the relevance and procedural consequentiality of this or that expertise may change from moment to moment (Schegloff, 1991, forthcoming [a], forthcoming [b]).

Shifting Expertise

That "expert" or "novice" is a candidate constitution of Self and Other which may be ratified or challenged in ensuing talk can be explained theoretically by the varying configurations of at least three interacting dimensions: the individual, the recipient, and the domain (or domains) of knowledge. That is, as we discussed above, the same individual can be constituted as an expert in one knowledge domain, but constituted as a novice when traversing to some other knowledge domain. Secondly, within a single knowledge domain, the same individual can be constituted now as more knowing, now as less knowing. Finally, in either of these two situations, the valence of expertise may shift with a change of recipients.²⁵ In Segments [1] through [4], we were able to illustrate temporary constitutions of less knowing and more knowing by isolating relatively short segments of interaction. We would argue, however, that any isolation of turns and short sequences to illustrate the status of a particular party as *the* expert or *the* novice in a fragment of interaction may be something of an artificial procedure, at least as far as transcripts of adult interaction are concerned, for any next turn can shift the until-then interactionally achieved distribution of expertise.

Let us take, for instance, Segment [4] and the turn which follows (we shall refer to this sequence as Segment [4A]):

Segment [4A] - RO Lab 10-17-90

01 Ron: So we're out of business. So (.) what
 02 you're telling me then is [if=
 03 [((looks at
 04 Gary))
 05 =[I ask [Gary and Daniel to=
 06 [((gestures to Gary))
 07 Marsha: [(s:)
 08 Ron: =measure at point nine nine [T g,
 09 [((looks back
 10 to Miguel))
 11 (0.5)
 12 Miguel: >I don't think you will< get[teh::
 13 Ron: [you won't get
 14 anything.
 15 (0.5)
 16 Miguel: No- nothing particular(lar)ly interesting.
 17 (4.2) ((Isabel looks at Ron after 1.0
 18 second and keeps her gaze on him as he
 19 moves to look at the graph))
 20 Ron: Do I agree with you? ((puts on glasses
 21 and leans forward to look at graph))

In our discussion of Segment [4] above, we noted that the fragment ends with Miguel being constituted as an expert as he confirms Ron's candidate understanding of the predictable experimental outcome (line 16). However, as Segment [4A] reveals, a long silence of 4.2 seconds follows (line 17), which itself may indicate some trouble for the current primary addressee (Ron). During this silence, Isabel's gaze turns to Ron (lines 17-19) who is pondering Miguel's graphs on the table. Her shift in gaze indicates that she considers Ron to be the relevant next speaker given Miguel's assertion at line 16. Ron's response finally comes as a spoken thought (line 20) which in that interactional moment undermines, rather than ratifies, Miguel's previously achieved identity as expert. This move recasts Ron's earlier understanding check as simply a check on what Miguel was literally saying rather than as a display of his acceptance that what Miguel said was correct. Indeed, the effect of Ron's utterance (line 20) suggests that the entire segment (starting

from lines 01-02) may have been a somewhat extended setting up (by Ron) of Miguel's position for critique.

Such a shifting constitution of knowing more and knowing less permeates the group's weekly meetings, some of which go on for more than two hours. Indeed, we sense that it is this interactional dynamism which drives the talk forward as participants disagree, raise questions, criticize, suggest, argue, co-construct utterances, and even remain silent. Were our unit of analysis the laboratory meeting in its entirety, our first four segments would be seen to be part of larger dynamically shifting configurations of expert-novice distribution, rather than snapshots of some temporarily static asymmetrical distribution of status and knowledge.

That the constitution of expertise can shift within the same speaker's talk as well as from one speaker to another is especially revealed in Segment [5]. This sequence comes from the continuation of the discussion concerning Miguel's experimental problem which was talked about in Segments [2] and [4]. This particular segment, however, occurs approximately 22 minutes after Segment [4]. During those 22 minutes (not shown) Ron reintroduced Marsha's suggestion from Segment [2] several times, and, after a brief discussion in which Marsha also participated, Miguel acknowledged that the issue raised by her suggestion was "very important." In terms of the larger context, it is worth mentioning that before the talk in Segment [5] occurs, the status of Marsha's suggestion had been transformed in the course of the discussion from being constituted as a novice suggestion (see Segment [2]) to being acknowledged as a more expert raising of an issue worthy of consideration, even if the suggestion has the status of not being actually implementable. Segment [5] comes in the midst of a detailed discussion between Miguel and Ron concerning the quantitative problems in Miguel's calculations, which have prevented him from accepting Marsha's suggestion on the spot.

In this segment, Miguel takes Ron step by step through the precise alternative (and conflicting) quantities which could be understood to be represented by the symbolic terms of his formula ("b over a"):

Segment 5 - RO Lab 10-17-90

01 Miguel: But I'm saying. (0.5) this over this (.)
02 can be either thirty-two over thirty,

03 (0.2) or it can be: thirty-two minus
04 [twenty-six (.)
05 [((Ron mild vertical headshake))
06 over thirty-two minus [(0.5)
07 [((Ron mild vertical
08 headshake))
09 >thirty-two minus twenty-six over thirty
10 [minus twenty-six.< And those
11 [((Ron mild vertical headshake))
12 are different numbers.
13 [(2.0)
14 [((Ron vertical headshake))
15 [((Miguel vertical headshake))
16 Miguel: >They are close to one< but
17 when you subtract one (0.5)
18 [(and that's) (0.2) that's what I'm
19 [((Isabel looks up at Miguel))
20 interested in.
21 [(5.0)
22 [((Miguel shakes head vertically
23 throughout pause))
24 [((Isabel looks at Ron after 4.0 secs. and
25 then looks at Miguel))
26 Miguel: So that's why this b over a ((i.e., b/a))
27 is bothering me and I (0.2) I have no idea
28 what to do with (it).
29 Ron: But (.) [M a r s h a [has just
30 [((points to Marsha)) [((Marsha
31 looks at Ron))
32 made a suggestion [that by shifting your
33 [((Isabel glances at
34 Ron))
35 time scale [you might be able to
36 [((Marsha looks at table))
37 (make it) go away.
38 [(0.6)
39 [((Marsha looks at Miguel))
40 Miguel: (But) I cannot shift the time scale (.)
41 li- linear(ly).
42 (.)
43 Miguel: By half a second
44 [(0.5) (it doesn't make any) al-
45 [((Isabel glances at Ron))
46 if if I start again (0.2) all the

47 analysis [(.) from
 48 [((Ron looks away from Miguel to
 49 blackboard))
 50 Ron: [No no. That's
 51 [((horizontal headshake))
 52 [((Isabel looks at Ron))
 53 ab- [t h a t ' s: [correct
 54 [((vertical headshakes)) [((Isabel
 55 glances at Miguel))
 56 and I: [I d o n ' t k n- [have a
 57 [((vertical headshake)) [((Isabel
 58 looks at Ron))
 59 suggestion for you. I don't know how to
 60 do that shifting.

Miguel packages his review of the quantitative problem he faces into several extended turns which are punctuated by frequent vertical headshakes on the part of Ron, indicating that Ron is following the explanation and inviting Miguel to continue. After what could be interpreted as a first attempt on Miguel's part to bring the description of the problem to closure (lines 18-20), Ron does not react as before despite Miguel's own vertical headshaking. That it was appropriate for Ron to react in some way at this point can be seen in Isabel's looking to Ron after a 4-second pause (line 24). Miguel's response to this lack of uptake on Ron's part is to offer a sequence-closing-implicative summary of the quantitative problem ("So that's why this b over a is bothering me") and immediately to follow with an admission that he doesn't know how to solve it ("and I (0.2) I have no idea what to do with (it)."), thus indicating the limits of his own expertise. Miguel has displayed that he is capable of defining the problem but not of finding an appropriate solution.

As we saw in Segment [2], in this group meeting when a participant seems to come to a dead end, someone (Marsha, in that segment) fairly soon offers a candidate solution, perhaps in a sympathetic attempt to help a colleague rescue his/her research efforts. In Segment [5], it is Ron who responds to Miguel's throwing up of his hands with another invocation of Marsha's suggestion as a way out of the problem (lines 29-37), a move which now constitutes Ron and Marsha (via Ron) as the momentary candidate experts. Yet, after a pause (line 38), Miguel rejects Ron's (and Marsha's) suggestion (lines 40-44), an interactional move which displays that although Miguel does not know what to do to get out of his predicament, he knows enough to be able to evaluate

Ron's (i.e., Marsha's) suggestion as impossible, thus refusing to ratify the candidate expertise to which Ron's turn made claim.

Miguel's rejection of the reinvoked solution is then followed by an incomplete formulation of what the consequences of taking up the suggestion would be for his work (lines 46-47). Perhaps Miguel has understood Ron's repeated invocations of Marsha's suggestion as an implied directive to begin a major reanalysis of his measurements. Ron dispels Miguel's inferred conclusion ("No no.") and aligns himself with Miguel's critique of Marsha's suggestion ("That's ab- that's: correct"). Ron backs down from his candidate solution and defers to Miguel's expertise as an experimentalist by not insisting that the measurements be reexamined. Nevertheless, though Ron finally admits that he lacks the expertise to suggest a way out of the dilemma (lines 56-60), his utterance presupposes that *some* sort of shifting would give meaning to the data, which is what Marsha had been suggesting all along. What these interlocutors ultimately achieve in this sequence is an interesting equalization of expertise among Ron, Miguel, and Marsha.

Segment [5] illustrates how the constitution of knowing more and knowing less, of "expertise" and "novicehood," can shift from participant to participant and from turn to turn within the talk of the same participant despite historical roles and hierarchical ranking. It was also shown in Segment [4A] that the apparently stable interactionally achieved distribution of expert-novice in a continuous stretch of talk can shift depending on the uptake of a particular participant at a particular point in the talk. Indeed, a closer look at the first four segments discussed in this paper would reveal many similar kinds of shifting of constituted expertise. And, as was suggested above, any isolated segment of interaction may appear to distribute expert-novice roles differently when the larger sequential context is taken into account.

CONCLUSION

This study demonstrates that expert-novice relationships in unfolding interaction are not necessarily functions of a priori macro-level social categories such as hierarchical status. Although some interactional sequences can reveal the co-occurrence of professional status and expertise, we have tried to show through a conversation

analysis of several segments of interaction that the constitution of expert-novice in dynamic interaction is a more complicated, shifting, moment-by-moment reconstruction of Self and Other, whether within a speaker's turn at talk or between speakers, and that the talk can be seen to be intricately organized by participants in ways other than those which derive directly from extrinsic social identities. We have also stressed that the constitution of a participant as expert at any moment in ongoing interaction can be a simultaneous constitution of some other participant (or participants) as less expert, and that these interactionally achieved identities are only candidate constitutions of Self and Other until some next interactional move either ratifies or rejects them in some way.

The interactionally dynamic constitution of expert-novice relations is especially worthy of study in contexts of adult teamwork, such as in a university physics research group, in which individual members bring their particular knowledges, perspectives, experiences, and expertises to the collaborative effort of the team as a whole. For it is through the complex array of questions and answers, of evaluations and agreement, of explication and problem-solving--in short, through the collaborative process itself--that participants negotiate who is more or less knowing at particular interactional moments.²⁶

Thus, rather than viewing interactional behavior as the direct, unproblematic outcome of participants' particular hierarchical social identities, we view interaction as the locus wherein social identities are co-constructed, maintained, and modified with consequences for future interactions, even if participants come to the interaction with professionally ranked social identities and a history of past encounters with one another. Indeed, one of our physicist informants, in a conversation about an earlier draft of this paper, quite spontaneously remarked that it is as if expertise and novicehood can each be understood to have a macro- and a micro-level of realization in that each participant has a macro-level and a micro-level expert-novice identity; that Ron, for instance, as principal investigator and as a leading figure in the scientific community, is unquestionably the "macro-expert" of the group, while in unfolding interaction he may be at one moment a "micro-expert" and at another, a "micro-novice."

It is just such a conceptualization of expert-novice relations, we have argued, that can help account not only for the bidirectionality postulated in activity theory-based models of apprenticeship, socialization, and learning, but also for change and

innovation in communities of practice. This view of the link between the micro-phenomena of interaction and the macro-structures of society and culture has been a philosophical and methodological tenet of ethnomethodology (e.g., Garfinkel, 1984) and conversation analysis (e.g., Heritage, 1984; Schegloff, 1987, 1991, forthcoming [a], forthcoming [b]; Hilbert, 1990), and it has also played an important role in anthropological studies of language use (e.g., Duranti, 1981; Ochs, 1988; Schieffelin, 1990; M. Goodwin, 1990). The implication for research in situated discourse is that in order to capture what any stretch of interaction may mean for the participants, the analysis of utterances ought to include an analysis of how social identities are realized in actual contexts of interaction as well as of how utterances and the surrounding interaction work together to constitute social identities.

NOTES

¹ We are grateful to Marjorie Harness Goodwin, Anna Lindström, Elinor Ochs, Emanuel Schegloff, Bambi Schieffelin, Jonathan Selinger, and Carolyn Taylor for their helpful comments on earlier drafts of this paper. This study is part of a larger project, "The Socialization of Scientific Discourse," directed by Elinor Ochs and funded by the Spencer Foundation (Grant No. M900824, 1990-1993).

² Welker (1991), for instance, eschews the expert-novice metaphor for classroom teaching because it "has been used to buttress professional privilege and to widen the distance between those who know and those who do not" (p. 19).

³ Indeed, because less expert novices have not yet been fully socialized into "insider" knowledge and ways of thinking, they may enjoy a certain advantage in approaching expert tasks. Engeström (1989), for instance, reports that in a task-comparison study (Engeström & Engeström, 1986) novice cleaning workers outperformed expert cleaning workers "in tasks requiring reasoning about the goals and structure of the entire activity system and organization," while experts excelled in "discrete routine tasks" (p. 16).

⁴ Lave & Wenger's (1989) concept of "peripheral participation" refers to the gradual incorporation of a newcomer or apprentice into a community of professionals, beginning with small, non-central tasks and gradually being encouraged by designated master practitioners to work towards a fully integrated professional competency.

⁵ But see Ochs (1990) for a discussion of how so-called novice children socialize their parents into parenting.

⁶ Heritage & Sefi (forthcoming) observe how the giving and requesting of advice in interactions involving health visitors and first-time mothers can constitute the participants as more or less knowledgeable and competent. Likewise, M. Goodwin (1990, pp. 75-108) discusses how requests and directives can constitute the leadership and competence hierarchy in the play activities of urban Black male children. She also sees these constitutions of asymmetrical relationships as

proposed identities which are dependent for their ratification on the response of others.

⁷ We are grateful to Manny Schegloff for pointing out that the absence of expertise in a particular setting may not necessarily be the constitution of novicehood in that domain but may instead be the constitution of another more relevant, complementary kind of expertise. Cicourel (1989) also makes reference to the complex distributions of expertise and novicehood throughout the phases of physician training and in continuing professional medical courses for practicing physicians.

⁸ We cannot say, at this stage of our analysis, whether national origin, linguistic competence, or gender directly play any role in the interactional phenomena we describe. Although we have described the participants using particular categorical terms (see "Participants"), the issue for any analysis, as raised by Schegloff (1989), is whether it can be demonstrated that such categorical or scalar factors are relevant to the participants and have consequences for their interaction as it unfolds.

⁹ We do not mean for this one physics group necessarily to be taken as representative of all physics groups. What is generalizable to other groups, we would claim, is our overall approach: to explore social categories, such as "expert" and "novice," through a close analysis of socially distributed and co-constructed interactional and linguistic phenomena.

¹⁰ Pseudonyms are used to protect the privacy of the participants.

¹¹ To our knowledge, there is no explicit code of interactional conduct established by or for this group to accommodate different types and levels of expertise. In interviews, some of the post-doctoral fellows mentioned that they feel the graduate students deserve priority attention from the principal investigator at the group meetings. However, many of these meetings include interactions primarily involving the senior members, while at other meetings there is much high-spirited disagreement and criticism involving both senior and junior members.

¹² We have deleted the following clarification sequence between lines 17 and 18 in Segment [1] since it is parenthetical to the interaction between Ron and Miguel which resumes immediately afterward:

```
Marsha:  = [Was that the sa:me paper you quoted befo:re?,
           = [ ((high voice; points [to screen))
               [ ((Ron turns head to
                 Marsha))
                   [ ((Miguel turns head to
                     screen))
Ron:      Well [we: would have no way
           [ ((Miguel turns head to Marsha))
           of [knowing. ((horizontal headshakes))
           [ ((Miguel turns head to Ron))
Marsha:  [You- you quoted one (.) a little (.) at the
           [ ((looks at Miguel))
           [ ((Ron looks at Marsha))
           [ ((Miguel looks at Marsha))
           beginning. (.) [of the talk.
Miguel:  [Well thi:s [one
           [ ((head and hand to screen))
```

Ron: [This is the beginning=
 [((to screen then Marsha))
 Marsha: =>This's the begi-< Oh. [Sorry.
 [((drops hand))
 (.)
 Marsha: Okay.=

13 Relationships between recipient eye gaze, emerging syntax, and the attention-getting device of pausing are discussed in C. Goodwin (1979, 1980).

14 Our data include photocopies of viewgraphs used in the meetings we recorded. In the case of successive rehearsals of upcoming conference talks, participants kindly provided us with all versions of viewgraph displays.

15 "Delta nought," which is equal to "b over a," is a formula notation corresponding to a barrier height. Space does not permit us to give a more detailed explanation for this and the other concepts briefly defined in this paper. While some of our readers requested glosses for the physics terminology used by the participants, it is doubtful, in the case of the segments analyzed in this paper, whether the simple content glosses which we provide add further understanding to the interactional import of the sequences. See Footnote 16 for an explanation of "barrier height."

16 A "barrier height" is the energy necessary to go from one physical state to another.

17 "Aging" refers to time decay in the measurement; a "spin glass" is a disordered magnet.

18 The entire intervening sequence is as follows:

Ron: ((looks at screen)) (0.4) It's:: you're getting it
 fu:ll I understand that.[But uh::
 [((glasses on; looks at
 notes))
 [Thee uh::
 Marsha: [(I think there's enough room up there.).
 [((high voice, gesturing to screen, opening &
 closing hand))
 Ron: (U- u-) one of-
 [I: have a [pro:b|lem
 [((removes glasses)) [((Miguel looks at Ron))
 [((Marsha raises & lowers
 left hand))
 ((Ron lays glasses on table: 'DUNK DUNK')) (0.2)
 [with your ta:lk, [(0.4) uh::
 [((Ron's hand to forehead)) [((Miguel looks down))
 not with the: (.) the physics in it, but with the
 >la:ck of references to anybody else's work.<
 [(0.4)
 [((Miguel keeps head down))
 Ron: Um:: (.) It's [no:t clear to me what Jaccari:no
 [((Ron points hand to screen))
 [((Miguel looks at Ron))

has done, [(0.4) or what Bir:geneau has
 [((Ron looks at Miguel))
 done, (0.3) an' what [you've done.
 [((Miguel moves viewgraph up))
 ((Ron looks at screen, keeps fingers pointing))
 (.)

19 In Segment [3], we have decided to transcribe spoken versions of scientific notation in as close a representation to their written form as possible so as to preserve their identity as formulaic concepts. Upper case letters in these phrases are therefore not meant to indicate loudness as in conventional conversation analysis transcription (e.g., Atkinson & Heritage, 1984, pp. ix-xvi).

20 "Birefringence" is the optical index of a material.

21 The evaluative teacher comment following teacher-initiated question-answer sequences in classroom settings has been discussed in research representing different discourse analysis traditions (e.g., Sinclair & Coulthard, 1975; McHoul, 1978; Mehan, 1985).

22 The term "d M d T" refers to a quantitative relationship between magnetism (M) and temperature (T).

23 "T g" stands for temperature of the glass.

24 The notion of "collaborative completion" was first introduced by Sacks (e.g., Fall 1965, Lecture 1; Fall 1968, Lecture 5; Fall 1971, Lecture 4). The collaborative potential of if/then utterances has been discussed in Lerner (1987, 1991).

25 C. Goodwin (1981, pp. 149-166) analyzes how, when engaged in a cooperative activity (e.g., playing bridge), speakers modify their emerging utterances as their gaze moves among recipients with differing amounts of relevant procedural knowledge.

26 On the construction of asymmetry in children's peer relationships, see the chapter on directives among Black male children in M. Goodwin (1990).

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Sally Jacoby, a Ph.D. student in the Department of TESL & Applied Linguistics, is interested in discourse analysis, authenticity in language pedagogy, and face-to-face feedback as a speech event.

Patrick Gonzales is a Ph.D. student in the Department of TESL & Applied Linguistics. His current interests include investigating tense and aspect from the point of view of situated interaction and alternative turn-taking systems in institutional settings.

APPENDIX

Transcription Conventions

Transcriptions conventions generally follow those developed by Gail Jefferson and other conversation analysts as cited in Atkinson & Heritage (1984, pp. ix-xvi). However, the following modifications to the notation conventions have been used in this study:

- | | |
|-------------|--|
| (xxx)/(yyy) | Alternative doubtful hearings are transcribed on the same line and separated by a slash rather than one above the other. |
| . . . | An inter-linear ellipsis indicate that intervening lines of transcript are not shown. |
| ((xxx yyy)) | Non-verbal behavior as well as explanations of mathematical expressions appear in double parentheses and in italicized font. |
| ?, | A question-mark followed by a comma is equivalent to the intonation notation ?. |

Counselor and Student at Talk: A Case Study

Agnes Weiyun He
Elizabeth Keating
University of California, Los Angeles

This paper explores ways in which expert and novice roles are constituted and maintained in an academic counseling encounter. By characterizing the counseling meeting as a socializing, problem-solving event and using both functional linguistics and discourse analysis as our methodological tools, we describe how the counselor¹ and the student mark stance through linguistic choices such as polarity, modality, superlatives, and reported speech. We also argue that the practice of withholding is an important means for both participants to create a zone of proximal development for whoever of them is the less expertized and that such a practice plays an important role in the power dynamics of the academic counseling encounter.

INTRODUCTION

The notion of asymmetry of power in an expert-novice relationship is crucial to the understanding of socialization, change, and development. This paper aims to examine how, in an academic counseling encounter, both expert and novice gain an important component of power--access to information and analytical inferential skills--through interaction. Using data from an academic counselor-student encounter recorded at a major American university, we examine linguistic constructions such as polarity, modality, and superlatives as well as strategies such as topic control, repair, reported speech, and the practice of withholding personal opinions and personal information, all of which serve to constitute varying degrees of expertise. We also look closely at how the counselor, trained by the university to withhold personal opinions and judgments, attempts to expertize the student in decision making, yet at the same time continually reifies his/her expert status through particular linguistic choices. Our discussion of expert-novice roles

and their constitution and relationship within the counseling encounter is informed by theoretical frameworks of cognitive development introduced by Vygotsky (1978) and developed by Leont'ev (1981), Ochs (1988), Ochs & Schieffelin (1984), Rogoff et al. (1989), and Lave & Wenger (1989). We shall demonstrate the role of language in producing, reproducing, and transforming notions of reality (Vygotsky, 1978, Giddens, 1984) and in constructing the sociocultural practices of a community (Bourdieu, 1977, 1990) by referring to transcribed excerpts from one conversation between a counselor and a student.

The Soviet sociohistorical school founded by Vygotsky and subsequently expanded by Leont'ev has argued persuasively for a situated conception of the learning process, one that integrates individual development within a social and cultural context. This model takes exception to the emphasis in Western learning theory on isolated individual development and instead privileges the role that society has in providing activities and skills which children eventually internalize or "appropriate" (Lave & Wenger, 1989) by participating in joint problem-solving with more skilled partners. It is these partners who bring the intellectual tools of society within the reach of children in a "zone of proximal development," the distance between a learner's actual developmental level and the level of potential development needed for independent problem-solving, by creating opportunities for problem-solving under adult guidance or in collaboration with more capable peers (Vygotsky, 1978, p. 86). Research in language acquisition and socialization (Ochs & Schieffelin, 1984; Ochs, 1988; Schieffelin, 1990) has demonstrated the importance of social and cultural contexts for cognitive development as individuals are socialized to use language and are socialized through language. This conception of language socialization is compatible with Vygotsky's view that specific tasks are organized in socially structured ways, that mental and physical tools are provided to master the tasks, and that linguistic systems function as the most important tools for influencing the organization and development of thinking.

Both Rogoff et al. (1989) and Lave & Wenger (1989) have offered modifications to the Soviet theories, addressing cross-cultural issues and inherent conflicts in expert-novice relations. Rogoff et al.'s concept of guided participation extends the notion of the zone of proximal development to include the developmental goals and communication styles of cultures other than the Soviet model, which stressed literacy and academic forms of discourse (Rogoff et al., 1989, p. 212). Their comparative study of children

in a Mayan village and in Salt Lake City reveals that the mutual roles played by children and their caregivers rely not only on caregivers' interest in fostering mature roles and skills but also on children's own eagerness to participate in adult activities and to push forward their own development. This dynamic is similar to the counseling session in which the counselor purposefully fosters the mature role of decision-maker in the student. However our study differs from previous socialization studies in that the counseling encounter is not an apprenticeship situation. The counselor does not enable the student to become a competent counselor; instead, the counselor facilitates the process whereby the student becomes an informed and skilled decision maker/problem solver. Thus, when we speak of the expert-novice relationship in the academic counseling encounter, "expert" does not necessarily equate with the counselor, nor "novice" with the student. Both the counselor and the student can be experts, depending on the phase of the interaction and the topic at hand.

This complex distribution of expert-novice roles among the participants in the academic counseling encounter includes interaction dynamics of power and conflict. Lave & Wenger (1989) discuss possible conflicts between expert and novice or "newcomer" and "oldtimer." When participation spaces for experts are limited, for instance, novices' appropriation of expert skills can undermine the experts' security. As Lave & Wenger observe, the classical concept of a zone of proximal development neglects the potentially conflicting goals of the expert and the novice, for experts and novices have different motivations and interests, a situation which creates an asymmetrical power relationship. Such asymmetry of power and status is particularly salient in institutional contexts such as a university academic counseling setting. The structure of any institution is organized so as to allow those in authority the power to pursue defined goals. The university educational system gives academic counselors, for example, the power to interpret the university's rules and requirements and to influence a student's choice of courses and major. However, it is not the case that counselors have complete control over students or that they always act out institutionally predefined roles; nor is it the case that students are totally powerless. In this paper we will highlight the negotiated nature of counselor-student interaction and we will also display it as a sociopolitical, or, as Henley (1977) suggests, a "micropolitical" activity, in the sense that the counseling activity reflects, reproduces and thereby helps sustain power and status relationships.

THE COUNSELING ENCOUNTER²

The academic counseling encounter that we are examining in this paper represents part of a range of academic advising services provided to undergraduate students at the university where the interaction took place. The largest proportion of academic counselors at this university are graduate students from various academic disciplines hired half-time (20 hours per week) who are trained by full-time academic counseling personnel to provide counseling primarily in the areas of "General Education" requirements, choice of major, and graduate and professional schools. Training focuses on university rules and regulations and the tenets of good counseling. Counselors attend training sessions of two to three hours, once per week for ten weeks, and continue to receive more specific training in special sessions held periodically throughout the summer and the academic year. Academic counseling encounters are one-to-one interactions between a counselor and a student. These meetings between counselor and student are held in the university academic counseling center, which is a large office divided by small cubicles. Although it is usually the student who takes the initiative in contacting the counselor by making an appointment, in cases of serious academic difficulty (such as a grade point average falling below 2.0 on a scale of 4.0), the university will notify the student that he or she is required to meet with an academic counselor. Counselors schedule their appointments at half-hour intervals.

Erickson & Shultz (1982) characterize the school counselor as an "institutional gatekeeper," for the counselor has the authority to make decisions and open or close the gates and channels of mobility not only within the school but within the larger society as well. In the university context which we studied, however, the counselor is not empowered to make decisions concerning an individual student's progress within the university. Instead, the counselors are instructed to listen carefully, to resist offering interpretations, attitudes, or personal feelings, to respond in ways which encourage the student to voice his/her difficulties, and then to focus on options and consequences. The counselors are also expected to elicit student goals, to ensure that information is correct, and to refer the student to other campus services when appropriate. Since the counselor is not supposed to make decisions for the student, the encounter must be conducted in such a way that all decisions are turned over to the student. "Telling the student what to

do" is thus explicitly excluded from the characteristic tenets of good counseling. The counselor's practice of withholding the expression of personal opinions and attitudes will be addressed later in this paper.

The typical counseling encounter exhibits the following overall structure: opening, establishing the agenda, clarifying the student's record and problem, supplying "official" information, offering advice, showing compliance or rejection, closure. During each of these phases, both parties display varying expertise on particular relevant issues and on the procedures for conducting the counseling encounter. By having come for academic counseling, the student initially takes on the role of the novice. However, students display expertise in matters concerning their problems. The counselor, on the other hand, initially assumes the role of the expert in addressing academic problems. Nevertheless, as we will show, expertise is constantly negotiated and reconstituted through the participants' talk as the counseling encounter proceeds.

With regard to the counseling encounter as a socializing, problem-solving event, it is observable that the counselor and the student are simultaneously engaged in the following activities: 1) socialization of knowledge regarding the rules and requirements of the university and strategies for maximizing both academic success and social mobility as a result of particular choices of major and future job opportunities; and 2) socialization of knowledge regarding the activity of academic counseling meeting: the counselor is accustomed to a set of conversational routines for characterizing the student in terms of progress and goals and consequently for determining appropriate information to give the student; the student, on the other hand, may or may not be familiar with these patterns of interaction.

DATA AND TRANSCRIPTION

The segments of transcript discussed in this paper are taken from an audiorecording made by the first author of a counseling session held in October 1990. The academic counselor is a male doctoral candidate in mathematics, in his third year of working as a counselor. The student is a female undergraduate transfer student of junior standing, trying to decide on her major. The reason for the student's coming to talk to the counselor is her desire to know

which particular major will give her the best chance for acceptance to medical school. The entire meeting lasted 22 minutes.

The interaction was transcribed according to conventions developed by Gail Jefferson (Sacks et al., 1974, pp. 731-733). Important transcription symbols used in this study are:

WHA	capital letters indicate emphasis, signalled by pitch or volume
.	falling intonation
,	falling-rising intonation
[]	overlapping talk
-	cut-off
=	latching of talk
:	prolonged sound
◦ ◦	superscript degree signs indicate low volume, quiet speech
>	rapid speech
<	slow speech
<<	very rapid speech
(3.0)	numbers in parentheses indicate silences in tenths of seconds
(.)	micropause less than 0.2 of a second
()	empty parentheses indicate uncertain or unidentifiable talk
-->	turn of analytical focus
(())	comments in double parentheses indicate analysts' comments
S:	capital and colon at the beginning of a stretch of talk identifies the speaker; in the following data S is for student, C for counselor

COUNSELOR AND STUDENT AT TALK

In the analysis, we will show how expert and novice roles are constituted through particular linguistic devices, specifically the use of polarity, modality, superlatives, adverbials of certainty/uncertainty, and discoursal devices such as control of topic, repair, and reported speech. These grammatical and discoursal structures contribute to the constitution of expert "stance" and novice "stance," which we define as a posture or attitude and which is closely tied to role. Both epistemic (pertaining to relative

knowledge) stance and affective (relating to emotions) stance are important in the constitution of asymmetrical power relationships, but, as was mentioned above, the counselor is under some constraint not to reveal affective stance. Polarity is the choice between positive and negative poles, as in "is"/"isn't" or "do"/"don't." Various kinds of indeterminacy falling in between these positive and negative poles are referred to as modality. Uncertainty can also be expressed through the use of adverbials, and instances of this device will be noted in the analysis. Use of superlative degree will also be examined, as will the use of reported speech, which we define as attribution, by direct quote or paraphrase, of third party speech.

Constituting Roles/Stance

Although the student constitutes herself³ as a novice by the very act of scheduling a counseling interview, the following segment shows how the counselor and student negotiate their respective roles linguistically in the first few minutes of their meeting. While the counselor controls the initial topic and then classifies the student within the institutional framework, the student does not accept the counselor's initial classification, though she marks her stance as novice by expressing uncertainty and by accepting the counselor's revised version of her identity:

Extract [1]

- 001 C: So:.
 002 S: All right um so,=
 003 C: =RIght now you are a math major.
 004 S: I AM a math I mean I TRANSferred as
 005 a math major.
 006 C: Ok.
 007 (.)
 008 C: Oh (.) Probably PRE-math.
 009 S: Premath (.) that's right.=
 010 C: =Ok,

As can be seen in extract [1], the counselor first opens the encounter by appearing to invite the student to initiate a topic ("So:.") though his choice of word, the stretched vowel, and falling intonation. Indeed the student interprets it as an invitation to start ("All right um so,"), but the counselor quickly steps in (note the

"latching" of his utterance onto the end of the student's) and begins the topic of the student's academic identity (lines 2-3). Though the student corrects the counselor's categorization of her as a math major, the counselor corrects the student (line 8) and assigns her an identity which conforms to an official university category ("PRE-math"), an identity which the student accepts. The counselor's institutional identity is not discussed, however, by the participants. Thus the counselor is directing the topic and defining roles.

The student, on her part, constitutes herself as a novice by indexing uncertainty in her own talk. Producing her initial correction of the counselor as a self-repair of her own utterance ("I AM a math I mean I TRANSferred as a math major."), the student appears to be correcting herself rather than the counselor (line 4), a strategy which helps to collaborate in the constitution of the counselor's role. Though the counselor mitigates his subsequent correction by using an adverb of uncertainty ("Probably") in "Probably PRE-math," this choice of modifier enhances his expertness by invoking a large body of experience from which he can generalize about a student's official academic identity. The counselor thus demonstrates his ability to make judgments as to the probability of facts which are not explicit, and the student acknowledges that his "educated guess" is correct (line 9). Before the first seven utterances of this encounter are completed, an asymmetrical relationship has already been constituted by the participants.

Polarity

In extract [2], the counselor uses linguistic polarity to establish the wide range of his expertise:

Extract [2]

((The student has raised the issue of whether math is a good major for going to medical school in the future.))

- 029 (.3)
 030 -->C: Uh b't I would say that certainly (.)
 031 medical school doesn't CAre
 032 whatjur major IS.
 033 (.8)
 034 C: Y-=
 035 S: =Yeah that's what I heard.
 036 -->C: What they do care is (.2) er did you

037 take the appropriate
038 classes, do you have the: (.) the grades
039 for appropriate
040 classes, do you have the overall GPA do
041 you have letters of recommendation
042 and so on so on so on.
043 (.5)
044 -->C: B't so the the most important thing is
045 you're going to medical school,
046 you need to take the classes that're
047 listed right-
048 (oops) talked about this already,
049 S: Uhum,

The counselor's use of polarity in extract [2], lines 30-31 ("doesn't care") and line 36 ("do care"), serves to cover the widest range of declarative parameters, maximally extending his expertise. Later in the counseling meeting he discriminates between things that do matter and those that don't, as shown in extract [3]:

Extract [3]

717 C: Yeah well, (.3) these're these're
718 behind the times.
719 (.2)
720 C: The petitions=
721 S: =How much behind?
722 -->C: It doesn't [matter how much.
723 S: [I did that I did that like-
724 C: In SUMmer.
725 (.)
726 C: Yea:h.
727 S: Right.
728 -->C: It DOESn't matter how much behind the
729 times. Because what (.2) what's in
730 your file (.2) uh petition is in your
731 file in mathematics department (.2)
732 uh when it comes to graduating they
733 don't look at this (.) they look at
734 the files.
735 (.)
736 S: Ok, so it doesn't matter?=
737 C: =So it shud (.) it should be showing

- 738 up in the future. B't (.) it
 739 MIGHT take (.) a VERY long time,
 740 S: hhh
 741 C: B't once you've got the petition
 742 approved in you file, (.2)
 743 S: [Yeah,
 744 C: [ss the problem is solved.

The counselor suggests in extract [3] that what does matter is that the student has the petition in her file and what doesn't matter is that it is not yet posted to her record. That the counselor's knowledge can override the student's printed transcript/record indexes him as expert indeed, since students are accustomed to using transcripts and written records as *prima facie* evidence of completed requirements. The student's follow-up question (line 736) seems to be a request for a second verification of the counselor's information, to which the counselor eventually replies with finality ("the problem is solved") in line 744.

Adverbials of Certainty and Use of Superlative Degree

Returning to extract [2], the counselor's use of an adverbial of certainty ("certainly" in line 30) and superlative degree ("the most important thing is" in line 44) conveys absoluteness and "truth" with authority. Equally notable is that while projecting himself as the expert and the authority, the counselor is also cautious to limit the interpretation of his statements with a modal "would" in "I would say" (line 30), a practice which we will discuss in greater detail shortly in reference to modality.

The student's speech is characterized by significantly fewer instances of such usage, however. She exhibits a hesitancy to use superlatives. For example, when the counselor encourages her to use a superlative in identifying what she would "most likely" major in and what she is "most" interested in, as in extract [4], she does not respond (line 142, line 144). Later in the encounter, when the counselor restates a question about the student's degree of preference and asks the student to say which major she likes "best," she responds "I like both" (extract [5]). After the counselor presses her further, asking why she likes them, she responds that it is because she does well in them. Judging by these responses that the student is unable to determine her own preferences, the counselor advises her to postpone making a decision:

Extract [4]

138 C: Ummm, (.5) So (.3) what I'd say is
139 (.2) if (.4) suppose you forget
140 about medical school completely (.2)
141--> what would you most likely to major.
142 (.4)
143 -->C: What do you find most interesting.
144 --> (.3)

Extract [5]

426 (.)
427 C: Right.
428 -->S: I like both,
429 C: =Why-
430 S: =I do WELL in both.
431 -->C: Another thing is that you DOn't
432 have to decide right this minute.
433 (.3)

In extract [5], the student uses an emphatic "well," but it is applied equally to majors the counselor has asked her to distinguish between.

In addition to an absence of superlatives, the student frequently uses constructions of uncertainty, such as "I am not sure" and "I don't know." Below are a few instances:

024 -->S: Yeah I am NOT sure if that is the
025 (.2) the RIGht thing or no:t.

053 -->S: Y' know, [but I I don't know
054 C: [Why why is that.

075 -->S: B't I don't know how tou:gh (.)
076 upper division math classes are
077 going to get.
078 -->C: No (hhh) you really don't. An'
079 you know what, I cannot tell you.
080 (.2)
081 C: .hh [Ha ha!
082 S: [uh ha!
083 C: Becu:se (.) er: what are (do) you

084 you probably in 32 now?
 085 S: I am taking 32A, right.
 086 C: Yeah.
 087 (.)
 088 C: Lemme- The way I went through
 089 a degree in mathematics is
 090 every (.) ye:ar I did
 091 I read > descriptions of what I
 092 was going to be learning the next
 093 year. I couldn't even understand
 094 it.< This is- < I don't know what
 095 his IS!! I mean (I didn't
 096 understand). hhh An:d (.8) ho:w
 097 (.4) if y if you're doing well
 098 in calculus, that's usually a sign
 099 that you (.) can be doing well
 100 later. But (.5) as to what your
 101 interest in what's going
 102 --> to be later it's it's really hard
 103 to tell. If you if you have
 104 always liked math, you will
 105 probably like upper division math.
 106 If you have always done well in
 107 math, you will probably do well
 108 in upper division math. But (1.0)
 109 it's hard for me to tell what
 110 it's going to be like.

When in lines 78-79, the counselor also displays uncertainty, the result is laughter. His laughter may indicate his discomfort at not being able to provide an answer to the student's indirect question (lines 75-77), or it may indicate that the student's indirect question is really unanswerable, that is, unreasonable. If the latter, this would mean not only that the student cannot distinguish between questions that are unanswerable and those that are but also that the student may thus be acting inappropriately. Perhaps to account for why he cannot supply the information that the student has expressed uncertainty about, the counselor relates a personal story about how he succeeded when he was a student despite not understanding some of the complex descriptions of math courses in the catalogue. The anecdote both reindexes him as more expert (since he obviously has already successfully completed his math degree), while at the same time he suspends speaking in the voice of the institution. In some

sense, however, the anecdote which begins with "I cannot tell you" is an answer to the student's problem: there is no hard and fast conclusion to be drawn from a course description in the catalogue, but students who have done well in lower division math typically do well in upper division courses.

Reported Speech

In this counseling encounter, the student uses reported speech, whereas the counselor speaks for the institution without attribution to specific persons. For example, in the following segment (line 20), the student tells the counselor that Linda, another counselor, has told her that medical schools accept a higher percentage of math majors:

018 S: Ok, (.8) anda when I (.2) when I
 019 was in the orientation, (.)
 020 --> Linda told me that (.2) it's a
 021 LOT better if I am a MATH major,
 022 (.) cu:s er medical schools they
 023 prefer math major people.

Later in the encounter, in line 206, the student again voices what "Linda said" regarding a petition to have a transfer class accepted for credit:

206 -->S: That Linda said we can jus=
 207 C: =should should should accept that.
 208 S: =Right.

In contrast, at line 233, the counselor challenges information provided by the student that is unattributed ("Who told you this?"). Such questions are never asked by the student:

230 (.2)
 231 S: So I have to take (.) 11C (.)
 232 11B 11C and 11CL.
 233 -->C: Ok, so who is this information
 234 (from) who told you this?
 235 S: Chemistry department,
 236 C: Ok, great.
 237 (.)

Unlike the student's use of reported speech, the counselor freely assumes the voice of the institution, whether of the university:

495 (.)
 496 -->C: .hhh So: we say well fine we
 497 accept you as say: (.) math major
 498 we're going to let you graduate
 499 as a math major. B't don't
 500 change your major.
 501 (.2)

or of a hypothetical medical school:

034 S: =Yeah that's what I heard.
 035 -->C: What they do care is (.2) er did
 036 you take the appropriate classes,
 037 Do you have the: (.) the grades for
 038 appropriate classes, Do you have
 039 the overall GPA do you have letters
 040 of recommendation and so on so on
 041 so on.
 042 (.5)

Modality

Various kinds of indeterminacy falling between positive and negative poles are called modality. According to Halliday (1985), the clause, organized as an interactive event involving the speaker and the hearer, relates the proposition to its context in the speech event in two ways. One is by "primary tense" and the other is by "modality." Primary tense refers to time relative to the moment of speaking. A proposition may become arguable by having its relevance to the speech event specified in these temporal terms. Modality indicates the speaker's judgment of the probabilities or obligations in what he/she says; it marks the speaker's stance. A proposition may become arguable by being presented in terms of its probability, frequency, obligation, and inclination. Halliday's temporal and modal operators are listed in Table 1:

TABLE 1
Temporal and Modal Operators

Temporal Operators		
past	present	future
did, was had, used to	does, is has	will, shall would, should
Modal Operators		
low	median	high
can, may could, might	will, would should, is/was to	must, ought to has/had to, need
(Halliday, 1985, p.75)		

An important resource which speakers can use to index expert/novice status, modality can express various degrees of stance which fall on a continuum ranging from low to high values:

probability (possible -> probable -> certain)
frequency (sometimes -> usually -> always)
obligation (allowed -> supposed -> required)
inclination (willing -> eager -> determined)

In extract [6], we will show how both the counselor and the student employ these grammatical constructs in constituting their roles by analyzing the temporal and modal elements in a particular stretch of talk:

Extract [6]

288 (.2)
289 C: Now y' need I think you need 18
290 upper division right?
291 (.)
292 C: Everybody needs 18 upper division.
293 (.)

- 294 C: [The math major
 295 S: [()
 296 C: The math major is 14.
 297 (1.2)
 298 C: B't that includes (.2) 7 (.4)
 299 biology.
 300 (.5)
 301 C: So that'll finish your biology
 302 requirement.
 303 S: Uhuh.
 304 C: An' then you need three upper
 305 division chemistry the organic
 306 chemistry series.
 307 S: Ok,
 308 C: An:d er that's it. I think.
 309 (.)
 310 C: So you need plus one-
 311 <<OH OOH OH!: and you need- how
 312 much English have you got.
 313 S: Oh I got=
 314 C: =English 3 and 4, (.4) Don't
 315 you need maybe one more?
 316 (.2)
 317 S: They didn't say anything?,
 318 C: Uh UCLA doesn't want it (.) b't
 319 (.) er medical school wants a
 320 year English.
 321 S: Well, isn't that a year English?=
 322 C: =Oh that's a year becus it's a
 323 semester school. Ok fine so (.5)
 324 in (either) case it doesn't
 325 matter. So then you need
 326 one upper division elective
 327 to make it up to (.4) 18.
 328 (.2)
 329 S: Ok,
 330 C: Ok.
 331 (.3)
 332 C: So biochem major, °a second°
 333 S: Also I HAVe to take 18 upper
 334 division classes anyway=
 335 C: =NO matter what to graduate (.)
 336 yeah (.) no matter

337 what.
 338 S: Ummmm.

Table 2 displays the temporal and modal elements used by the participants in extract [6]. Also indicated are the line numbers, speaker, and grammatical subjects of the clauses in which these elements are located:

TABLE 2
 Temporal and Modal Usage

Ln	Sp	Subj	Temporal	Modal
289	C	y' (student)		need
292	C	everybody		needs
294	C	the math major	is	
298	C	that	includes	
301	C	that		will
304	C	you		need
308	C	that	is	
310	C	you		need
311	C	you		need
312	C	you	have	
313	S	I	got	
315	C	you		(don't) need
317	S	they	didn't (say)	
318	C	UCLA	doesn't (want)	
319	C	med school	wants	
321	S	that	is(n't)	
322a	C	that	's	
322b	C	it	's	
324	C	it	doesn't (matter)	
325	C	you		need
333	S	I		have to

Ln = line number

a,b = clauses in the same line

Sp = speaker

Subj. = grammatical subject

C = counselor

S = student

In terms of the counselor's speech, from Table 2 we can see that primary tense is used by the counselor to assess courses already

completed (lines 312, 322) and to clarify the facts concerning the major or the requirement (lines 296, 298, 318-19, 322). (Left unanalyzed are lines 308 and 324-5: "that's it" and "it doesn't matter" are set phrases that carry low semantic values.) Modality is used to both explain requirements that need to be fulfilled (lines 289, 292, 304, 310, 315, and 325) and to explain application of course work toward the requirements (line 301).

On the other hand, the student takes on the role of the listener in this segment. In the few instances when she does provide comments or questions, she uses primary tense in three instances (lines 313, 317, 321) and modality in one instance (line 333). Similar to the counselor's usage, the student uses primary tense to clarify facts concerning the requirements (what she has completed, in lines 313 and 321, and the fact that nobody has reminded her of her deficiency, if any, in line 317) as well as modality to indicate requirements that need to be fulfilled ("I HAVE to take 18 upper division"). What differs between the student's and counselor's usage, however, is that when the student uses modality, the grammatical subject is "I" (line 333); the stance implicated by the modal element is oriented toward the speaker herself, whereas when the counselor uses modals, he is orienting toward the student (lines 289, 304, 310, 315, 325), toward students (line 292), or toward requirements (line 301) in general.

Extract [7] provides more examples of modality employed for other purposes:

Extract [7]

- 241 (.8)
 242 -->C: Uhhhhh now you need (1.) uh
 243 3 (.2) your physics. So 8A
 244 B C.
 245 (.3)
 246 S: Mmm.
 247 -->C: But it COULD mean 3ABC or 6ABC,
 248 (.2)
 249 S: Ye:ah. It could have been-
 250 I was trying to (.) get to 6A,
 251 b't they clo- the class was
 252 closed. [So
 253 C: [Right.
 254 S: Signed up for 8.

- 255 -->C: Ok. [you can swi- you can switch.
 256 S: [and I figured it's a lot
 257 harder.
 258 -->S: I can?=
 259 -->C: =Y'know you can take 8A 6B 6C
 260 if you want. That's fine.
 261 [No problem.
 262 S: [Ok. Yeah.
 263 (.)
 264 -->S: I'll probably do that.
 265 C: Though for the math major, (.2)
 266 [talk to Lin-
 267 S: [it's better to ()
 268 -->C: Becus for many math majors you
 269 need 8A (.) and 8C.
 270 (.5)

In addition to using the modal operator "need" (line 242 and line 268) to explain requirements to be fulfilled, a practice we noted in extract [6], in lines 247, 255, and 259, the counselor provides suggestions/options for the student as to how to satisfy the physics requirement (either by taking Physics 8ABC or 3ABC or 6ABC or by switching between these series). In these three instances, the modal operator "can/could" is employed. Similarly, in lines 258 and 264, the student uses modals ("can" and "I'll") to verify with the counselor what she herself can do to satisfy the requirement and to indicate what she herself will do to satisfy the requirement.

We observe, then, the following general trends in the distribution of temporal versus modal operators in the extracts we have presented:

Primary tense is used by the counselor

- (a) to discuss what course requirements the student has already fulfilled; and
- (b) to present to the student facts regarding the courses.

Modality, on the other hand, is used by the counselor

- (a) to explain applications of already completed courses toward the requirements;
- (b) to tell the student what requirements remain to be completed; and
- (c) to make suggestions on how to satisfy the remaining requirements.

Through the use of primary tense, the counselor presents himself as being neutral and objective when discussing general issues of majors, requirements, and courses the student has already completed. His stance becomes more marked (through the use of modality), however, when he explains to the student what requirements remain to be completed, how the courses apply towards the requirements, and when he makes suggestions as to how the student can satisfy these requirements.

The counselor employs different types of modality to perform different institutional tasks. Modal operators of high value ("need / need to" and one instance of "must") are used to explain what requirements the student has yet to complete. Modals of median value ("will") are used to clarify for the student how her course work applies towards the university requirements. And finally, modals of low value ("can" / "could" and one instance of "might") are used to provide suggestions and options as how to satisfy the requirements. In other words, the counselor marks his stance by alternately ranging from what is certain to what is possible to indicate to the student what is required, what is supposed, and what is allowed in her academic career at the university.

The Practice of Withholding

We have discussed how counselor and novice roles are constituted through specific grammatical choices, as evidenced in the language of the counseling session. But another practice is also at work here. In order to foster the development of the novice's skills in navigating through the university and making decisions about which majors and courses to choose, the counselor has been trained to withhold certain information the student is looking for--personal opinions or expert judgments which the student might appropriate as her decision. This policy of withholding exists because the university has determined that what the novice should appropriate from the counseling encounter is tools for decision making.

In extract [8], the student wants to know what job prospects she has with a math degree:

Extract [8]

519	(.2)
520	S: .hhh There's another thing
521	I want to know. What can I
522	DO (.) with a math (.) degree.

- 523 (.)
 524 C: You go to medical school,
 525 ((smiling voice))
 526 S: ((laughter)) I know, (.2)
 527 well (.) suppo:se
 528 [we decide not ()]
 529 C: [suppo:se you decide you're
 530 not going to medical school.
 531 (.2)
 532 C: Uh (.2) >(when students) ask
 533 me the question (.) I usually
 534 give the MOre or less the
 535 same answer.< Eh: (.) what
 536 can you do with ANYthing
 537 (°is my first answer°).
 538 hhha En the second answer
 539 is (.2) y you can sell
 540 yourself y- if y' if if no
 541 graduate school is what
 542 you're interested in, (.)
 543 if you're mainly interested
 544 in say I'm going to TAKE my
 545 math degree and going to
 546 run and LOOK for job.
 547 (.3)

((The counselor then explains that there is no one-to-one correspondence between a major and a career option.))

In extract [8], the counselor first delays his response with a joke (line 524) by repeating what the student stated earlier in the interaction (see extract [7]) and then reframes the question to address it on a less personal level (lines 532-535). By designing his response for a set of students (through the use of "usually" in line 533 and of "more or less the same answer" in lines 534-35) rather than for the specific individual student, the counselor withholds a direct and personal reply to the question and thus socializes the student into the knowledge that majors are not job training and that a career path is larger than an undergraduate degree. By withholding an answer specifically tailored to the student's question about what she can do with a math degree, the counselor avoids addressing the contradiction between institutional goals and individual aspirations. The university, as a social institution, aims to provide a liberal arts

education and, the counselor implies, leaves the students solely responsible for fitting their undergraduate degrees to the demands of the job market (lines 539-40). We see in this interaction, perhaps, a clash between the liberal arts philosophy of the university and the prevalent view in American society that higher education is matched clearly with particular job opportunities.

Sometimes the counselor withholds his personal judgment to reject the whole basis for the student's question. In extract [9], the student is debating the merits of majoring in math as opposed to majoring in microbiology. One of the factors she considers is how difficult upper division math classes are:

Extract [9]

073 (.6)
 074 S: B't I don't know how tou:gh (.)
 075 upper division math classes are
 076 going to get.
 077 C: No (hhh) you really don't.
 078 --> An' you know what, I cannot
 079 tell you.
 080 (.2)
 081 C: [((laughter))
 082 S: [((laughter))
 083 C: Becu:se (.) er: what are (do) you
 084 you probably in 32 now?
 085 S: I am taking 32A, right.
 086 C: Yeah.
 087 (.)
 088 C: Lemme- The way I went through
 089 a degree in mathematics is
 090 every (.) ye:ar I did
 091 I read > descriptions of what I
 092 was going to be learning the next
 093 year. I couldn't even understand
 094 it.< This is- < I don't know what
 095 this IS!! I mean (I didn't
 096 understand). hhh An:d (.8) ho:w
 097 (.4) if y if you're doing well
 098 in calculus, that's usually a sign
 099 that you (.) can be doing well
 100 later. But (.5) as to what your
 101 interest in what's going

- 102 --> to be later it's it's really hard
103 to tell. If you if you have
104 always liked math, you will
105 probably like upper division math.
106 If you have always done well in
107 math, you will probably do well
108 in upper division math. But (1.)
109 it's hard for me to tell what
110 it's going to be like.
111 (.5)
112 S: Uh yeah. Cus I DOn't wanna do
113 something that I'm gonna be
114 STUCK with. Y' know,
115 C: Yeah.

In extract [9], the counselor explicitly tells the student (lines 78-79) that he cannot answer the question she implied in lines 74-76, although, being a much more advanced math major himself and having 2-3 years experience as a counselor, he ought to have (and most likely does have) a feeling for how difficult upper division courses are for the average student. In asking how difficult the courses will be, the student sees level of difficulty as an attribute of a course, while the counselor apparently understands that the difficulty of a course depends on the student's ability in the subject and her prior experience (lines 102-109). By withholding the kind of answer that the student anticipates, the counselor channels her to think along a different line and to adopt a different perspective.

Withholding personal opinion as a strategy is not the exclusive province of the counselor; it is also employed by the student. The student's expertise in the interaction comes from ownership of the personal knowledge of events relevant to the issues being addressed. In extract [10], the student withholds the personal information that she wishes to be a microbiology major until she is reassured by the counselor that any major is acceptable for medical school. Withholding gives her time to be empowered with new information (and perhaps analytical skills) before giving away whatever information she already has:

Extract [10]

- 040 C: B't so the the most important
041 thing is you're going to medical
042 school, you need to take the classes

- 043 that're listed right- (oops)
 044 talked about this already,
 045 S: Uhum,
 046 C: Y' know, a year of English,
 047 ((cough)) a pile of biology,
 048 a pile of chemistry,
 049 S: That's right.
 050 C: Yeah all that stuff.
 051 S: So ([))
 052 C: [Now THat can fit in any major.
 053 --> S: I thought if I (.3) if I become a
 054 microbiology major that's going to
 055 be a lot easier for me to get better
 056 GRA:des.
 057 C: Uhuh,
 058 S: Y' know, [but I I don't know
 059 C: [Why why is that.
 060 C: Because y you are better at
 061 microbiology? Or=
 062 S: =Well I am GOOD in biology.
 063 C: Uhuh,
 064 S: I really li:ke biology.
 065 [Reading and all that.
 066 C: [Great. (.) Great.

It is not until the counselor displays his expertise that the student proffers her own plan. By waiting, she enhances her expertise about formulating reasonable plans. She knows that what she is about to say will not be contradicted by the counselor and will not pre-empt the information he has to offer. Here we see a paradoxical situation in which the student secures her position of expertise with respect to knowledge regarding her own questions and concerns by withholding instead of displaying information. In contrast, the counselor withholds his expert knowledge in judgment and decision-making so as to provide a zone of proximal development and thereby develop expertise in the student and to minimize his responsibility as well as the risk of being challenged in his expertise.

It was noted earlier that in the academic counseling encounter the counselor and the student potentially have conflicting goals and motivations. The counselor's objective, by training, is to listen to students' problems, present and explain university requirements, and provide options. The student, on the other hand, expects

definite answers to questions and solutions to problems. Hence, there is an inherent clash of expectations from the very beginning in any encounter. By withholding personal opinions and judgments (as in extracts [8] and [9]), the counselor, in addition to minimizing personal liability for what he says, is also socializing a different way of thinking. In other words, by not telling the student exactly what she wants to hear, the counselor is providing a zone of proximal development for the student to make decisions and judgments on her own, to be "expertized" and therefore empowered. Reciprocally, by empowering the student, the counselor re-enacts his own position of power and expertise.

CONCLUSION

We have described the negotiated nature of expert and novice roles in the academic counseling encounter and illustrated how these are continually reproduced in linguistic terms. We have also shown the asymmetry of power inherent in such roles, since the very linguistic means used to index expertise can also index power. The linguistic devices of polarity, modality, and reported speech all serve to constitute an expertise or lack of expertise that reaches beyond the level of the sentence to control the shape of an interaction. The counseling encounter thus reflects, reproduces, and thereby helps sustain power and status relationships. We have also noted the institution's role in constituting the asymmetry of power in the expert-novice relations of the counseling encounter. The university instructs the counselor to withhold from the arena certain elements of his own expertise so that the student can gain expertise in decision-making skills. The flow of information from expert to novice in the academic counseling encounter is thus institutionally constrained, though not in the competitive way described by Lave & Wenger (1989). In this discussion we have focused more on the role of the counselor than on that of the student. As the roles of the counselor and the student are mutually constitutive, it remains to be investigated how the student's role is defined through the reciprocity of linguistic choices.

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NOTES

¹ The academic counselors, themselves graduate students, whom we discuss in this study are called "counseling assistants" in the university where they work, and they are differentiated from full-time counselors whose duties include implementing university rules such as acting upon students' petitions and dismissing students. For the sake of convenience, we have used the title "counselor" to refer to counseling assistants.

² The ethnographic descriptions of the counseling setting and counselor training are drawn from the first author's two-year experience as an academic counseling assistant.

³ In this paper, we use "he/she" in discussions pertaining to counseling encounters in general. We use "he" to refer to the counselor and "she" to refer to the student in the particular counseling session under scrutiny because the actual data are an encounter between a male counselor and a female student.

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Agnes Weiyun He is a Ph.D. candidate in Applied Linguistics at UCLA. She is interested in the relationship between grammar, discourse, and social construction. Her dissertation project explores the relevance of context in analyzing talk in institutions.

Elizabeth Keating, a Ph.D. student in Anthropology at UCLA, has carried out field work in Pohnpei, Micronesia. Her research interests include situated language use in highly stratified societies, socialization processes, and cultural use of space.

Evidentiality and Politeness in Japanese

Amy Snyder Ohta

University of California, Los Angeles

According to language socialization theory, language learning does not occur in isolation but is intimately related to the process of becoming a competent member of the target language society (Ochs & Schieffelin, 1984). To become competent members of society, language learners must learn, among other things, how to display their knowledge appropriately, using epistemic markers (evidentials) effectively. In this paper, the importance of epistemic markers in language socialization is discussed from the perspective of the second language classroom, the broader goal of the study being to more fully understand what second language learners must acquire in order to become competent members of the target language community. Through analysis of a conversation among Japanese teachers outside the classroom, this paper investigates the linguistic resources for constituting epistemic stance in Japanese. Like English, Japanese evidentiality can be marked with adverbials and idiomatic phrases. In addition, Japanese is rich in sentence-final particles which directly index interactive contexts. The function of epistemic markers in Japanese discourse is investigated, focusing on how epistemic markers, such as sentence-final particles, adverbials, and hedges function to reduce speaker responsibility.

INTRODUCTION

Second Language Acquisition as Language Socialization

The purpose of this paper is to show, through the analysis of spontaneous naturalistic discourse, how linguistic resources for constituting epistemic stance in Japanese make an utterance more polite by reducing the speaker's responsibility for that utterance. This analysis furthers the broader goal of more fully understanding what novices need to acquire in order to be full participants in Japanese interaction. For second language learners of Japanese residing outside of Japan, the Japanese language classroom is the crucial agent of language socialization¹--for it is through the language that learners are socialized how to the express stance in

Japanese. However, as pointed out by Maynard (1985), in the language classroom, overemphasis on the teaching of formal structural rules has eclipsed the use of language for communicative interaction. Thus, unless language learners are provided with natural models of Japanese interactive discourse, they are likely to be socialized into inappropriate modes of communication in Japanese. In the typical teacher-fronted classroom where students may not be exposed to such models, students are unlikely to be socialized into appropriate expression of epistemic stance, because appropriate models of interaction are absent in the environment in which language socialization is taking place. By more fully understanding what occurs in spontaneous naturalistic discourse, Japanese language teachers not only may be enabled to analyze what is missing in the language socializing spaces which they provide their students, they may also be better equipped to provide their students with the input necessary for appropriate interaction in Japanese language contexts.

Epistemic Stance and Language Socialization

While stance can be defined as "the overt expression of an author's or speaker's attitudes, feelings, judgements, or commitment concerning the message" (Biber & Finnegan, 1988, p. 1), epistemic stance relates more specifically to the speaker's relationship with what s/he knows or believes to be true. Epistemic stance, revealed through epistemic markers (or evidentials) therefore gives interlocutors information about the speaker's commitment to the truth of his or her message, the speaker's source of knowledge, and the speaker's certainty about his or her utterance (Givón, 1982; Chafe, 1986). Epistemic markers are crucial tools in human communication--without them we would not be able to discern fact from conjecture, the speaker's own ideas from the ideas of another, or even have any idea of how a speaker felt about the information he or she was presenting. Maynard (1985), states that "for successful communication one must present information so that the listener can assimilate new information with already given and established knowledge" (p. 217). Epistemic markers are an important part of this process. In addition, through epistemic markers, speakers constitute themselves as experts or novices (Latour, 1987)--and since language socialization occurs through such expert-novice interaction, epistemic markers are a key part of the process. In language socialization theory, language learning is not something that occurs in isolation, but is intimately related to the process of

becoming a competent member of a society. Ochs & Schieffelin (1984) explain this as follows:

1. The process of acquiring language is deeply affected by the process of becoming a competent member of a society.
2. The process of becoming a competent member of society is realized to a large extent through language, by acquiring knowledge of its functions, social distribution, and interpretations in and across socially defined situations, i.e., through exchanges of language in particular social situations. (p. 277)

According to Schieffelin (1990), "Much of socialization takes place simply through recurrent participation in interactions with knowledgeable members. In many of these interactions, caregivers make explicit 'what everyone knows'" (p. 18). Thus, the role of epistemic markers in language socialization is an important one. Novices, whether children or second language learners, must learn how to display their knowledge in an appropriate way without imposing it in circumstances which may change drastically from moment to moment. They must learn to deal with the tension between knowledge and the socially appropriate display of knowledge. And, the medium through which these things are learned is language. How, then, are epistemic markers used in daily conversation? Understanding what epistemic markers are and how they work can give us a window through which to view how novices are socialized through language.

Epistemic Markers

Epistemic markers, also called "evidentials" have been defined differently by different scholars. In general, epistemic markers are considered to be those linguistic markers which show the source of knowledge or the speaker's evaluation of the truth of an utterance. Givón (1982) describes evidentials as markers showing speaker's evaluation of the truth-value of a proposition and revealing the speaker's placement of the proposition in epistemic space. According to Chafe (1986), "evidentiality involves attitudes toward knowledge" (p. 262). Biber & Finnegan (1988) consider epistemic markers to mark not only the source of knowledge but

also to encode what Weber (1986) termed "validation" information--the speaker's attitude towards his or her message.

Each language has its own resources which speakers draw upon to show the source of their information or their evaluation of the truth of their messages. Chafe (1986), in his discussion of evidentiality in English, points out that English "expresses evidentiality with modal auxiliaries, adverbs and miscellaneous idiomatic phrases" (p. 261).

What about Japanese? Japanese, like English has broad resources for the expression of epistemic stance. In Japanese, evidentiality can be marked with adverbials and idiomatic phrases. In addition, Japanese is rich in sentence-final particles² which directly index interactive contexts. Chafe (1986) explains that since "speaking is an involved, social activity . . . speakers pay more attention to direct experience, and to the ways in which their thoughts and expressions match ongoing expectations" (p. 262). Japanese sentence-final particles and other epistemic markers directly index the social contact involved in speech, showing in linguistic form this matching process (Clancy, 1982; Cook, 1988, 1990a, 1990b, 1991; Matsumoto, 1985). Clancy (1982) points out that

The personal contact between speaker and hearer in Japanese triggers not only morphological markers of politeness, but also a number of different particles which express the speaker's attitude, the illocutionary force of the message, and concern for the listener's comprehension. (p. 61)

Givón (1982) states that propositions which are considered to be certain, "taken for granted," or "unchallengeable" require "no evidentiary justifications" by the speaker (p. 24). However, in Japanese face-to-face interaction even the most certain, most taken-for-granted utterances often contain epistemic markers. In order to determine the characteristics of evidentiality in Japanese conversation, an investigation of face-to-face interactive contexts is crucial.

There have been several studies concerned with epistemic markers in Japanese, yet few of these use natural conversational data to determine what Japanese epistemic markers are and how they are used. Kuroda (1973) discusses Japanese sensation words which exist in adjective/verb pairs, in general, the adjective being used to describe the speaker's own sensations and the verb form being used to describe the sensation of someone besides the speaker. Kuroda's

data is based on native speaker intuitions about Japanese. Aoki's (1986) work outlines "three areas of meaning associated with Japanese evidentials" (p. 233). Because he does not use natural conversational or written data but relies on his intuitions to discover these epistemic markers, his list of epistemic markers is quite incomplete. Of the three areas of meaning Aoki describes, the first comprises expressions showing indirect evidence--the Japanese adjective/verb pairs describing sensation discussed by Kuroda (1973). Secondly, Aoki discusses expressions which show that evidence is valid--expressions containing the particle *no* or *n*. Aoki explains *no/n* + copula (*desu* or *da*) as, among other things, a marker of factivity which "removes the statement from the realm of a particular experience and makes it into a timeless object. The concept thereby becomes nonspecific and detached" (p. 229). Aoki asserts that *no/n* + the copula "is a marker which converts a statement for which ordinarily no direct knowledge is possible into a statement which is asserted as a fact" (p. 230). Thirdly, Aoki discusses hearsay or inferential statements using *soo*, *yoo*, or *rashii*, three forms which carry the sense that the word "seems" carries in English. The word *mitai* also carries the same sort of meaning, though it is not mentioned by Aoki. In his discussion of hearsay, Aoki does not discuss direct or indirect quotations marked by *to* or *tte*. Aoki does, however, explain how adverbials function in inferential statements in Japanese to show "the speaker's attitude towards the truth value of a statement" (p. 234), whether the speaker's attitude is one of certainty or uncertainty. He then explains how some of these epistemic markers may function in politeness. I will return to this notion later.

McGloin's (1980, 1983/1984) work is primarily concerned with *no/n* + the copula. McGloin proposes that *no* is used when the speaker assumes knowledge or familiarity of the hearer to mark an explanation or a contrast, to persuade or convince the addressee of the speaker's opinion, to emphasize a statement, or to give background information. Using Kamio's (1979) analysis of the speaker's territory of information, McGloin states that *no* can be used to make an utterance more polite by presenting "information which is held exclusively in the speaker's territory of information as if it also belongs to the hearer's territory of information" (1983, p. 135). McGloin (1983/1984) also discusses *ne* as a particle used "to create rapport between the speaker and the hearer . . . by assuming knowledge on the part of the hearer" (p. 137).

Tsuchihashi (1983) seeks to place the sentence-final particles on a continuum from certainty (declaratives) to uncertainty

(interrogatives) through an analysis of their use in dialogue occurring in Japanese novels. According to Tsuchihashi, Japanese sentence-final particles serve to show (1) a speaker's confidence or certainty in an assertion, (2) a speaker's level of willingness to have an utterance challenged, and (3) a speaker's "solicitation of confirmatory or corrective response" (p. 361). Tsuchihashi discusses sixteen sentence-final particles: *daroo*, *deshoo*, *ja nai ka*, *ka*, *kamoshirenai*, *ka na*, *kashira*, *na/ne*, *sa*, *wa*, *yo*, *ja nai kashira*, *wa ne*, and two phonetically null particles. Through various analyses, such as an analysis of the subject of each utterance, with a stated first-person subject serving as evidence of certainty, Tsuchihashi places the particles on a continuum from declarative to interrogative (high degree of certainty to low degree of certainty).

However, Tsuchihashi's conclusions are tentative, and, because her data do not consist of spontaneous naturalistic discourse but of dialogues written in novels, the validity of her results may be questioned. In addition, while some of the particles she discusses were quite numerous, others were quite rare in her corpus--for example, while *yo* occurred 108 times, *kamoshirenai* only occurred 8 times. Although one might be able to begin to draw conclusions about the particles which occur quite frequently, I have reservations about drawing any conclusions concerning the certainty represented by a particle on the basis of only a few occurrences. Therefore, while I find Tsuchihashi's efforts to empirically demonstrate a continuum from declarative to interrogative interesting, more work needs to be done if the existence of such a continuum is to be truly validated.

Cook (1988, 1990a, 1990b, 1991) uses data from naturally occurring tape-recorded conversations in her analysis of Japanese sentence-final particles. Cook (1988) discusses Japanese sentence-final particles as indexicals. According to her analysis, *yo* is used by adults to negotiate power and indexes social status/power in adult relationships. *Yo* is also used to point out facts/events unnoticed by others. Cook (1988, 1991) discusses *ne* as a particle which expresses the "general attitude of mutual agreement" (1988, p. 155). Cook (1990b, 1991) proposes that *ne* is a marker of "affective common ground," showing how an affect marker can index an epistemic stance. According to Cook *ne* is generally used when a speaker is displaying or seeking agreement, confirmation, or cooperation. Cook (1988) also discusses the function of *ne* in politeness--this will be discussed later in this paper.

Cook (1988, 1990a) sees *no* as a particle whose "most important indexical meanings concern a speaker's epistemological

disposition" (1988, p. 180). While a bare declarative indexes the speaker's "individual authority for knowledge" (1988, p. 180), according to Cook, statements marked with *no* show that the speaker, together with his or her group, authorizes knowledge. According to Cook's analysis, this relates to Aoki's analysis of *no* as a marker of factivity because knowledge authorized by a group may be assumed to be true. When *no* acts as a nominalizer, it indexes the speaker's removal from the feelings and experiences described.

The Role of Epistemic Markers in Japanese

In several studies, Japanese epistemic markers have been noted as playing a role in politeness.³ Both Cook (1988, 1990a) and Aoki (1986) explain how the linguistic markers they discuss function to make language more polite. Aoki explains how *no/n* as a marker of factivity "is a despecifying evidential, and is used to minimize the speaker's involvement" (p. 235). He points out that the use of *no/n* may "tone down the harshness of a request," "soften the expression of desire," or "cite a statement as something for which the speaker cannot be held responsible" (p. 235). However, the first two categories ("tone down the harshness of a request" and "soften the expression of desire") may be collapsed into the third, the function of *no* in all three cases being to reduce the speaker's responsibility for an utterance by minimizing the speaker's involvement in his own utterance. For instance, in Aoki's example showing "tone down the harshness of a request," *no* is used to express the fact that a request has been made by someone other than the speaker, and thus the speaker is exonerated of any responsibility for the request. His example showing the function of *no* to "soften the expression of desire" may be analyzed similarly, since *no* takes the speaker's expression of desire and makes it into a depersonalized fact for which the speaker is now less responsible. Cook analyzes the use of *no* in politeness by pointing out that *no* makes an utterance more formal or polite because, as a nominalizer, its use indexes a speaker's removal from the feelings and experiences described. In this way, to use Brown & Levinson's (1987) analysis, particles such as *n/no*, which distance the speaker from his or her assertion, thereby reducing his or her responsibility for the utterance, may function to protect the addressee's negative face wants.⁴ Cook (1990a) and McGloin (1983/1984) also point out that *no*, which can be used to create rapport,⁵ can be used to protect the addressee's positive face wants⁶ as well.

In her analysis of *ne*, Cook (1988) points out that among its many functions, the over-arching purpose of the particle is to create common ground between speaker and hearer by showing the speaker's desire for harmonious and agreeable interaction. Cook (1991) analyzes *ne* as a marker of positive politeness. However, *ne* may also be analyzed as a particle which reduces the speaker's responsibility for his utterance--by indexing the speaker's desire for harmonious interaction, the speaker shows the addressee that his or her ideas may be modified at any time. By using *ne*, the speaker invites the addressee's participation in the co-construction of ideas, thereby reducing his or her responsibility for what occurs in the conversation and satisfying the addressee's negative face wants.

Besides the particles *n/no* and *ne*, however, many other epistemic markers also function to protect the face wants of the addressee by reducing the speaker's responsibility for his or her utterance. Many of the Japanese epistemic markers found in this study's corpus serve the aims of positive or negative politeness. Moreover, epistemic markers in the corpus commonly appear towards the end of an utterance--this is by no means surprising, since many of the epistemic markers are sentence-final particles which must occur in sentence- or phrase-final position. What is interesting, however, is how these markers are used in combination to reduce the speaker's responsibility⁷ for his or her utterance.

EPISTEMIC MARKERS USED IN A JAPANESE CONVERSATION

The Conversational Corpus

The 2400-word⁸ corpus analyzed for this paper is a transcription of 30-minute audio-taped meeting between "O," a lecturer in charge of an intermediate-level Japanese course, and his two teaching assistants, "T" and "S." O, the lecturer, is a Japanese male, 31 years of age, who has had several years of experience in teaching the intermediate Japanese course. His teaching assistant, S, a Japanese female, is 38 years old and has worked as a teaching assistant in the intermediate Japanese course for four years, in the previous three years having worked with O's predecessor. T, a 28-year old Japanese female, is new to Japanese language teaching. All three participants are native speakers of standard Japanese. During the teachers' meetings, O explains the grammar points to be taught

the following week and provides time for trouble-shooting and problem-solving related to difficulties the teaching assistants are having in their classrooms. This meeting being a face-to-face interactive context, the corpus is rich in sentence-final particles and other epistemic markers which show source of knowledge and the speakers' attitudes towards their utterances. This data is also interesting because the interactants have varying levels of experience, age, and professional status, and these differences are reflected in their language use.

Distribution of Epistemic Markers in the Conversational Corpus

Though by no means an exhaustive list of Japanese epistemic markers, from the corpus I isolated 38 different markers which might be considered epistemic markers. Each item below is followed by an approximate gloss in English and by the frequency of its occurrence in the corpus:⁹

Sentence-Final Particles¹⁰

<i>ne</i>	marker of affective common ground	53
<i>no/n + copula</i>	factivity/group authority/ shared knowledge	46
<i>ja nai/ja nai ka</i>	'couldn't it be that'	15
<i>keredomo/kedo/kedomo</i>	non-logical 'but'	12
<i>yo ne</i>	emphatic + <i>ne</i>	10
<i>deshoo</i>	tag question: formal form	5
<i>ka na</i>	'I wonder'	5
<i>kamoshirenai</i>	'perhaps'	3
<i>mitai</i>	'seems'	2
<i>daroo</i>	tag question: informal form	1
<i>kashira</i>	'I wonder'	1
<i>na</i>	'I wonder'	1
<i>nan tte iu kashira</i>	'I wonder what I should say'	1
<i>no ka</i>	'could it be that'	1
<i>to iu koto</i>	factivity marker	1
Total occurrences		157

Hedges

<i>ano</i>	'uh'	70
<i>nanka</i>	'something'	35
<i>ma</i>	'well'	2
Total occurrences		107

Adverbials

<i>amari/anmari</i> + neg.	'not much'	9
<i>betsu ni</i>	'not particularly'	8
<i>ichioo</i>	'sort of'	7
<i>jissai ni</i>	'in reality'	4
<i>hijoo ni</i>	'extremely'	1
<i>wari to</i>	'pretty much'	1
<i>sugoku</i>	'extremely'	1
<i>daitai</i>	'roughly'	1
<i>dooshite mo</i>	'absolutely'	1
<i>kanarazushimo</i> + neg.	'absolutely not'--negative polarity	1
Total occurrences		34

Direct/Indirect Speech

<i>tte iu/to iu</i>	quotation markers	8
<i>sore dattara</i>	'if it is as you said'	3
<i>sakki itta yoo ni</i>	'as you said earlier'	1
Total occurrences		12

Other

<i>tada</i>	'just'	8
<i>yappari</i>	common sense knowledge	7
<i>dake</i>	NOUN + 'only'	3
<i>gurai</i>	NOUN + 'about'	4
<i>dochira ka to iu to</i>	'whatever one says'	4
<i>VERB/ADJ-i-soo</i>	'seems'	1
Total occurrences		27

Function of Epistemic Markers in the Corpus

As was discussed above, one major function of epistemic markers in Japanese is to minimize the speaker's responsibility for his or her utterances, thereby elevating the role of the addressee and satisfying the addressee's positive and negative face wants (Goffman, 1967; Brown & Levinson, 1987). These markers are used alone and in combination, reducing speaker responsibility in a number of ways. Through the use of epistemic markers, speakers may (1) show hesitation about an utterance, (2) show information to exist as independent fact, (3) attribute an utterance to someone else, (4) omit reference to themselves, or (5) even abort an on-going predication, thereby giving listeners responsibility for completion of the message.

Show Hesitation About an Utterance

In the corpus, speakers show hesitation in a number of ways. The speaker may **question the truth of his/her proposition**, transforming it from being an assertion of fact to being a suggestion. Sentence-final particles with this function include *ja nai ka* [is it not so?], *ka na* [I wonder], *kashira* [I wonder], *na* [I wonder],¹¹ and *no ka* [is it the case that]. In excerpt (1), O is explaining to his two teaching assistants (TAs) how the structure "*no nara*" is used in Japanese. After giving examples of "*no nara*" in sentences, O states his opinion concerning its meaning, using *ja nai ka*:¹²

(1)O: dakara dochira ka to iu to
so which *q qt* say *pt*
So whatever is said

--> "when" ni chikai n **ja nai ka na** to omou n desu kedo,
"when" *pt* close *pt cop-ng q pt qt* think *pt cp* but,
is it not, perhaps, that (it is) close to "when" in meaning
I think but,

Rather than stating the meaning of "*no nara*" using declaratives, O limits his own responsibility for the truth of the utterance, by questioning the truth of his own proposition, thereby allowing room for his interlocutors to respond.

Speakers may also directly **elicit the involvement of others** through the use of *ne*, *deshoo* [tag question, formal form], or *daroo* [tag question, informal form]. In the following excerpt, O is explaining to his two TAs the difference between the conditional structure "*tara*" and the provisional structure "*ba*" in Japanese. When T responds that she doesn't understand his explanation, O begins again, giving a particular example of a context where "*ba*" cannot be used in place of "*tara*." As in the excerpt above, O does not state his opinion using declaratives. He instead elicits the involvement of T, thereby reducing his responsibility for the utterance:

(2)O: "wakaranakereba dooshite,
"understand-*ng-prv* why,
"Should you not understand, why

--> kikanakatta n desu ka" tte hen **deshoo?**
 ask-ng-pst pt cop q" qt strange pt ?
 didn't you ask" sounds strange, **doesn't it?**

In his discussion of the grammar point at hand, rather than telling T that the sentence "Should you not understand, why didn't you ask" is strange in Japanese, he gives his own opinion that it sounds strange and elicits her involvement through the use of the particle *deshoo*, here functioning as a tag question.

Speakers also show their hesitation by **showing their uncertainty of the facts**. In the corpus this is accomplished through use of the sentence-final particle *mitai* [seems/as if] and the lexical items *yoo* [seems], *gurai* [about], and *kamoshirenai* [perhaps]. Speakers can underscore this uncertainty by using various negative polarity adverbials, such as *betsu ni* + negative verb [not particularly], *amari/anmari* + negative verb [not much], *sonna ni* + negative verb [not so much], and adverbials such as *ichioo* [sort of], *wari to* [pretty much], and *daitai* [roughly]. In excerpt (3), S's answer to O's inquiry about the week contains both the adverbial *betsu ni* + negative verb [not particularly] and *mitai* [seems/as if]:

(3)O: nanka konshuu are ga arimashita? Mondai.
 something this week that pt existed? Problem.
 So, this week were there any problems?

(4)

O: Ano
 Uh

-->S: **Betsu ni** nakatta desu ne.
Not especially exist-ng-pst cp pt.
 There weren't any **especially**.

--> Konshuu wa yariyasukatta **mitai** desu ne=
 This week tp easy-to-do-pst **seems** cp pt=
 This week **seems** to have been pretty easy to teach=

=yappari fukushuu da shi
 =Of course review cp pt
 =Of course, it was review

By using *betsu ni* and *mitai* to show her uncertainty of the facts, S allows room for the opinions of others. But S's second marked

sentence sounds distinctly odd in English--why would S show uncertainty of the truth of her own experience? Perhaps S, as the more experienced of the two TAs, may be expressing uncertainty because she is speaking for both herself and for T, a role which is commonly taken by more experienced group members. While S's intentions are impossible to determine, the use of *mitai* effectively reduces her responsibility for her utterance by showing uncertainty.

Another way that speakers demonstrate hesitation is by **implying the inadequacy of their ideas** through the non-logical use of *kedo/keredomo* [but]. While this 'but' can be used as a logical connector to show logical relationship between ideas, the sentence-final non-logical 'but' does not show how the propositions it modifies logically connect to other ideas. Instead it shows the speaker's hesitation or attempt to discount the importance of an utterance. In excerpt (4), T uses *kedo* to show hesitation when pointing out to O something he didn't fully explain in the lecture:

(4)T: A hitotsu dake ano:
Oh one item only uh: but,
Oh there's just one thing uh:

--> "aida" -no tokoro na n desu **kedo**,
"during" *ps* place *cmp pt cp* **but**
it's the construction "during,"

O: Hai
Yes
Uh-huh,

T: "nantoka shiteiru" toka "nantoka suru" toka
"doing something" or "do something" or
The constructions "doing something" or "to do something"
for example,

sore- sore o sonna ni
These- these *ac* not so much
You didn't particularly

setsumei shinakatta desu yo ne
explanation do-*ng-pst cp pt pt*
explain these.

This use of *kedo/keredomo* also appears in excerpt (1) and in excerpt (7), but in (7) it functions as a logical connector.

Hedges such as *nanka* [kind of/something], *ano* [uh], and *ma* [well] are also quite common as markers of hesitation. Examples of the use of *nanka* and *ano* can be found in excerpts (3), (4), (7), (8), and (12).

Another effective method of showing hesitation involves not linguistic structure but the suprasegmental feature of loudness--speakers may **turn down the volume**, allowing their speech to trail off into silence at the ends of their utterances. In some cases this fading away is so dramatic that capturing the utterances on tape proved impossible. While the difficulty in collecting data caused by these drops in volume prevents the statement of any firm conclusions, these sharp decreases in volume seem to be used by speakers to reduce responsibility for utterances by demonstrating hesitation. In the corpus, decreases in volume are used in statements of personal opinion, when making requests, and when combined with linguistic markers of uncertainty. In excerpt (5), O is continuing his explanation of the conditional and the provisional. The decrease in volume (shown by the falling black line) occurs in the third line of this excerpt as an accompaniment to his statement of opinion as to what he thinks the students find easy to understand:

5) O: Kore wa sonna ni kyoochoo shinakute ii desu.

This *nm* that much emphasize do- *ng* good *cp*.

It's okay not to stress this so much.

Ano provisional de yatta hoo ga

Uh provisional *pt* do-*pst* side *nm*

Uh, calling it the "provisional"

gakusei wakariyasui to omou.

students understand-easily *pt* think.

makes it easier for students to understand I think.

In this excerpt, it is only the decline in volume which shows O's hesitation in giving his opinion.

Unlike excerpt (5), in most of the other cases of this phenomenon in the corpus, these sharp decreases in volume are

accompanied by the use of other epistemic markers which heighten the effect of hesitation. In excerpt (1), for instance, repeated below as (6), the decline in volume accompanies a statement of opinion by O. However, in this case, the decline in volume overlays other markers of hesitation, such as *ja nai ka*, which elicit the involvement of others, as well as the non-logical use of *kedo* [but] which heightens the tentative feeling of the utterance. Excerpt (6) is a good example of how epistemic markers can be layered with declining volume to heighten the effect of uncertainty:

6) O: Dochira ka to iu to=

Which *q qt* say *pt=*

Whatever is said=

="when" ni chikai n ja nai ka na=

= when *pt* close *pt neg q pt=*

=it's close to "when" in meaning=

=to omou n desu kedo,

=*qt* think *pt cp* but,

=I think isn't it, but,

Most examples of declining volume in the corpus are like (6) in which decreases in volume are accompanied by other epistemic markers, a combination of resources which produces a general effect of hesitation or tentativeness, thereby decreasing the speaker's responsibility for his or her utterance.

Show Information to Exist as Independent Fact

Showing information to have an existence independent of the speaker is accomplished through a variety of linguistic means in the corpus. The speaker may use a **marker of factivity** such as *n/no* or *to iu koto* [the fact that ~]. The speaker may also mark information as existing outside of him/herself by **marking an utterance as "common sense"** through the use of the lexical item *yappari* [as expected/of course/as anyone would expect]. In the following excerpt, S is describing to O the attendance problems she is having in her class. S uses both the factivity marker *no/n* and the

lexical item *yappari* to mark her statements as independent fact/common sense, while O uses *yappari* in his response to show his judgment of the situation to be a common-sense conclusion:

(7)S: De, ku ji-no kurasu ga ano:

And, 9:00-*ps* class *nm* uh:

And, in my 9:00 class uh:

--> ni juu nin gurai iru **n** desu kedo
twenty people about exist *pt cp* but
there are about twenty people but

--> **yappari** asa hayai noka ()
naturally morning early *cmp q* ()
naturally maybe since it's early ()

--> nan nin ka konai **n** desu ne?
what people *cmp* come-ng *cp pt*
some of the students don't come you know?

O: [A: konai. () un. Ee sore to ne,
[Oh: come-ng. () uh-huh. Yes that and *pt*,
[Oh: they don't come. () uh huh. Yes that and also,

--> are **yappari** () nn,
that **of course** () uh,
that **of course** () uh,

sekushon de kuizu ga nai kara, () doo shite mo ne ...
section *pt* quiz *nm cp-ng* thus, () how do even *pt* ...
there are no quizzes during section time, () so whatever we
do ...

By using markers of factivity and common sense such as those in excerpt (7), the speakers display propositions as facts which exist independently of their own individual opinions, thereby reducing their personal responsibility for the truth of the message.

Another way to mark a statement as an independent fact is to **mark the utterance as group-authorized** or shared knowledge through the use of *no/n* (Cook, 1988, 1990a). In excerpt (8), O explains to the TAs that the provisional structure "*ba*" was covered in the first year curriculum, relying on the group's common knowledge of the first-year Japanese curriculum:

(8)O: De ano: (1) mazu saisho wa kore ano !ba! () to iu yatsu
de.

pt uh: (1) first *tp* this uh !ba! () *qt* say thing

pt
So uh: (1) first, this uh "ba" structure.

De ichioo ano () ichi nen sei-no (are ga) ano::: nan
daroo na

pt somewhat uh () first year-*ps* (that *nm*) uh::: what *pt*
pt

Anyway uh () during the first year they did that uh::: what
should I say

--> !tara! tte iu no wari to shikkari () yatteiru **no** ne?
!tara! *qt* say *cmp* fairly rigorously do-*prg* *pt* *pt* ?
the structure "tara" was pretty rigorously done, right?

No in the last line of (8) marks the entire proposition as being factual information that is authorized by others. After marking the information as group-authorized, the speaker then further reduces his responsibility for the statement by eliciting the involvement of his listeners through the use of the particle *ne*.

Attribute the Utterance to Someone Else

In the corpus, speakers attribute their utterances to others through a variety of linguistic means, whether **indirect/direct quotation, mimicking another's voice, or making the truth of their utterance contingent upon the truth of a previous speaker's utterance** (as in the phrase *sore dattara* [that being the case]). In excerpt (9), T uses an indirect quotation marked by *sakki itta yoo ni* [as you said earlier] and bases her disagreement with O on something that he said earlier in the conversation, thereby limiting her own responsibility for contradicting O:

(9)T: yappari "yooroppa ni ikeba () nantoka ga miremasu"
Obviously "Europe *pt* go-*prv* () something *nm* see-*pot*"
Obviously ((we can say)) "Were you to go to Europe you
could see one thing or another"

--> toka **sakki itta** yoo ni rojikku-no toki shika
 amari ...
 or **just say-pt** manner *pt* logic-*ps* time except
 not much ...
 or **like you said a moment ago** unless there's a logical
 connection ...
 ((implied: we can't use this structure. See the
 discussion of excerpt (13) below for an analysis of
 this ellipsis.))

In excerpt (10), T **mimics another's voice**. Rather than voicing her own opinion to O as to what was or was not difficult for her students, T uses her students' voice to speak, even using a different tone of voice to make her students' voice distinct from her own:

(10)O: nanka konshuu are ga arimashita? Mondai.
 something this week that *pt* existed? Problem.
 So, this week were there any? Problems.

[segment of transcript omitted]

-->T: ichiban saigo-no toko dake wa minna "**muzukashii**
 naa" toka
 The very last *ps* place only *tp* everyone **difficult**
 pt and
 Just the last part everyone was saying
 "**This is soo hard**" and ...

That T is using her students' voice in this excerpt is made apparent not only through her use of a different tone of voice, but also through her use of the particle *na/naa* which is much less formal than the language T uses when talking to O and S. *Na/naa* is used in Japanese when people talk to themselves, and T is thus mimicking her students' voices as they talked to themselves.

Avoid Pronominal Reference to Self

One simple way to reduce responsibility for an utterance is for the speaker to avoid the use of first-person pronouns. Moeran (1988) points out that "one of the features of Japanese is a marked *absence* of pronominal usage" (p. 430). Moeran states that in Japanese "personal pronouns are avoided because using them

creates a sense of differentiation among individuals in a group" (p. 430). There are only nine occurrences of the first-person pronoun "I" (either *boku* or *watashi*) in the corpus, while it is ellided forty times ("zero" pronoun). The distribution of the first-person pronoun in the corpus is as follows:

Uses of the First-Person Pronoun

Zero Pronoun:	40
Pronoun used to show	
personal experience/personal opinion	4
solidarity shown through the particle "mo" (also)	4
Other: possessive structure	1
Total occurrences	49

As in other languages, the absence of first-person pronouns represents the norm in Japanese conversation, yet speakers are well able to conduct conversations which include the statement of their opinions. When these pronouns are used, what seems to be their function? When the first-person pronoun appears alone, as it does in four of the nine cases in which the first-person pronoun surfaces in the corpus, the pronoun seems to emphasize the personal or individual nature of an opinion or experience. In four other cases, the pronoun appears in combination with the particle *mo* (which means 'also') to show the speaker's agreement with a previous speaker's assertion--in these cases, the first-person pronoun plus *mo*, rather than emphasizing the personal or individual nature of a proposition, show solidarity and agreement with a previous speaker.

In excerpt (11), first-person pronouns are used three times, each followed by the particle *mo*. In this brief exchange, S has just explained how she told her class that the Japanese *-teiru* construction is useful for expressing duration. O and T both agree with her, using the first-person pronoun followed by *mo*. In the excerpt both the first-person pronouns *watashi* (used by female speaker T) and *boku* (used by male speaker O) occur with the particle *mo* (meaning 'also'):

(11)O: soo da ne,
 Yes, *pt pt*,
 Yeah uh-huh,

--> ii/ii koto wa ii to omoimasu **boku mo**=
 good/good thing *tp* good *qt* think **I also**=
 I also think that that's a good thing=

-->T: [soo desu ne, n: **watashi mo**
 [right *cp pt*, uh: I **also**
 [uh-huh, uh, **me too**

O: =Kokuban ni kaite chotto hen da na to omotteita
 kara=
 =Board *pt* write a little strange *cop pt cmp* think-*prg-pst*
 so=
 =Writing on the blackboard I thought (the alternative
 explanation) was a little strange so=

-->T: **watashi mo** kocchi no hoo ga ii desu ne tte
 I **also** this *ps* side *nom* good *cp pt qt*
 I **also** thought that this one was better

jibun de koo doriru yattete omotta kara
 self *pt* this way drill do think-*pst* so
 because doing the drills myself I thought the same thing

The repetition of the first-person pronoun and *mo* provides a strong sense of agreement and solidarity in excerpt (11). The speakers are not just asserting their opinions and taking individual responsibility for the utterances. Instead, by agreeing with a previous speaker they share responsibility for the utterances with the previous speaker, thereby reducing their responsibility for the utterance. However, it is important to note that 82% of first-person pronouns in the corpus were ellided. Not only does this absence of personal pronouns avoid the "sense of differentiation among individuals" described by Moeran, it also gives a speaker even broader leeway in reducing responsibility for his or her utterances.

Abort

Rather than directly stating their point, another way speakers reduce responsibility for their utterances is not to come to the point at all, but to abort an ongoing predication (Besnier, 1989). One of the functions of ellipsis in Japanese is to reduce the speaker's responsibility for his or her utterance (Okamoto, 1985). In excerpts (12), (13), and (14), speakers discontinue their utterances before reaching or completing the verb, leaving the main point of the utterance to be discovered by a perceptive listener, who may voice and thus be credited with the completed utterance. In excerpt (12), O is giving examples of the provisional "*ba*" in order to explain the

structure to his TAs. T, however, disagrees with O's analysis, but manages never to directly state her disagreement because she leaves off the verb ending which would directly contradict O. In O's subsequent turn, he completes the verb form which T had left incomplete:

(12)O: Nanka "yooroppa ni ikeba" to iu to nanka ano:
 Something "Europe *pt* go-*prv*" *qt* say *pt* something uh:
 Uh if you say "Were you to go to Europe" or something uh:

S: Aa
 Oh

O: Jitsu ni soo iu koto nai n dakedo mo nanka
 un.
 Reality *pt* this say thing exist-*ng* *pt* but something ()
 uh.
 In reality no such thing'll happen, but still there's something
 () uh.

-->T: Demo (soo iu toki mo amari) "ikeba" tte () **tsuka::=**
 But (that say time *pt* not really) "go-*prv*" *qt* **use::=**
 But in that case "ikeba"=
 ((NOTE: T ellides the negative ending on the verb "use."))

O: =**tsukawanai**=
 =use-*ng*=
 =**isn't used**= ((O re-states verb adding negative ending))

Without explicitly saying so, T states her opinion in excerpt (12) that the linguistic structure being discussed isn't used in the way O has described. T provides only the bare stem of the verb *tsuka*- and stretches out the final vowel without giving the verb its negative ending. O completes her utterance by repeating the stem *tsuka* previously uttered by T and adding negative ending *wanai*. By means of this strategy, T expresses her disagreement with O without actually stating her contradiction--O utters the crucial negative ending which she elides.

In excerpt (13), which is the next line of the same conversation, T uses the same strategy, leaving her last sentence incomplete. In this case, however, O does not utter her missing words, but T's unstated meaning is clear:

- (13)T: yappari "yooroppa ni ikeba () nantoka ga miremasu"
 Obviously "Europe *pt* go-*prv* () something *nm* see-*pot*"
 Obviously ((we can say)) "Were you to go to Europe you
 could see one thing or another"

--> toka sakki itta yoo ni rojikku-no toki shika
 amari ...
 or just say-*pst* manner *pt* logic-*ps* time except not
 much ...
 or like you said a moment ago unless there's a logical
 connection ...((implied: we can't use this structure.))

In excerpt (13), T ellides the verb altogether, leaving her sentence incomplete, but by using the words *shika* [except] and *amari* [not very], two negative polarity adverbs which require a negative verb, her negative implication can be grasped by the listeners without being directly stated. The last line of excerpt (7), repeated below as (14), provides another good example of this ellipsis (See excerpt (7) for context):

- (14) O: sekushon de kuizu ga nai kara, () doo shite mo ne,
 section *pt* quiz *nm* *cp-ng* thus, () how do even *pt*,
 there are no quizzes during sections, () so whatever we do,
 ((implied: some students will be absent.))

In excerpt (14), O leaves his sentence incomplete for his listeners to interpret.

CONCLUSION

As the excerpts from the corpus indicate, Japanese epistemic markers do not occur in isolation but are used in combination, frequently at the ends of utterances. Their location is by no means remarkable since many of these markers are sentence-final particles. What is remarkable, however, is that almost every utterance in the corpus, regardless of speaker, contains one or more of the markers discussed. Out of 178 total utterances,¹³ 138 (or 78%) contained one or more epistemic markers.¹⁴ Unmarked utterances were generally comments like "Oh really" or were responses echoing words uttered by a previous speaker. Indeed, throughout the corpus, the conversation appears to undulate as each speaker's

responsibility for his or her utterances is reduced due to the clustering of these epistemic markers at the ends of utterances. The examples which showed declining volume also demonstrate how speaker responsibility for an utterance declines suprasegmentally.

Why are epistemic markers which reduce a speaker's responsibility for his or her utterance so frequent in Japanese? If these epistemic markers are functioning as politeness strategies, what face threatening act (FTA)¹⁵ is being mitigated? One possibility is that, in Japanese, face-threatening interactions are not only those proposed by Brown & Levinson (1987).¹⁶ Perhaps many more kinds of interaction in Japanese are potential FTAs. For example, something as seemingly innocuous as an explanation of a grammatical structure may be a threat to the addressee's negative face because to explain may be seen as an imposition of the speaker's view on the hearer. The speaker, then, may mitigate this FTA by using epistemic markers to reduce responsibility for the utterance, allowing the hearer to maintain or contribute his or her own point of view. The simple act of keeping the floor to talk about one's own experiences may also be seen as an imposition on those listening, and thus epistemic markers may be used to increase the participation of others, thereby satisfying their positive and negative face wants. If it is true that in Japanese what counts as an FTA includes a much broader range of actions than in English, this could begin to explain why interactive communication in Japanese requires constant mitigation through epistemic markers--mitigation which is necessary in order to maintain the positive and negative face wants of interlocutors.

Implications for Language Socialization

According to the theory of language socialization (Ochs & Schieffelin, 1984; Schieffelin, 1990), language learning does not occur in a vacuum but is imbedded in the process of becoming a competent member of society and is a tool through which socialization occurs. Japanese children learning their first language are surrounded by and co-participate in constantly interactive contexts in which they are exposed to all of the strategies used by interlocutors in Japanese to display attitudes towards knowledge. Through the process of growing up in Japanese society, then, Japanese children learn how to understand and use these epistemic markers successfully.

What about adult second language learners? If second language learning is taking place in Japan, where adult novices can

choose to become active participants in Japanese society, the motivated learner has a good chance of acquiring these conversation strategies both through interaction with experts and through peripheral participation in Japanese society.¹⁷ However, the learner of Japanese outside of Japan has much more limited contact with cultural experts, being very dependent upon the language teacher as the source of cultural data. As has been noted by Clancy (1982) and Cook (1991), the use of sentence-final particles is dependent upon the speech genre, with a high incidence of these particles indicating a high level of interaction. Clancy (1982) has pointed out that in public lectures these particles are seldom used. Cook (1991) has found other genres with limited use of particles, most notably debates between government officials in the Japanese Diet. I suspect that in the typical teacher-fronted Japanese language classroom, epistemic markers might be used quite differently than they are in non-pedagogical face-to-face communicative interaction. And, if we consider language learning to be a process of socialization, two questions present themselves: What aspects of culture are these learners being socialized into? Will the most successful of these students be able to interact in diverse social situations in Japanese society? Investigating both how epistemic markers are used in the Japanese language classroom as well as how these epistemic markers, therefore, appear in the interlanguage of adult second language learners may be able to provide us with more insights into the process of language socialization.

NOTES

¹ The term "language socialization" here includes "language acquisition"--acquired linguistic competence (Krashen & Terrell, 1983) as well as "the process of becoming a competent member of a society" (Ochs & Schieffelin, 1984, p. 227) as that society is represented in the language socializing spaces available to the learner. Whether or not "language socialization" can take place in the classroom may be questioned because the society of the target language of course cannot be completely represented in the classroom. However, I propose that to the extent that the classroom can reflect properties of the target society, the classroom functions as a language socializing space. Because socialization is always taking place, the classroom which does not reflect the target language culture is a classroom in which learners will be socialized inappropriately. Therefore, it is imperative that those in the business of classroom language teaching consider how to make their classrooms places where learners not only acquire linguistic structure, but also undergo the process of language socialization by which they may learn modes of social interaction which are appropriate in the society where the target language is spoken.

² In this paper "sentence-final particles" includes a wide range of sentence-final devices based on Tsuchihashi (1983).

³ The analysis in this paper is based on Brown & Levinson's (1987) model.

⁴ In Brown & Levinson's (1987) analysis, negative face wants are the desire that a person has "that his actions be unimpeded by others." The politeness of negative face is the "politeness of non-imposition" (p. 62).

⁵ McGloin (1983) states that this rapport is derived from the speaker's presentation of new information as if that information were known to the listener. Cook (1990), however, states that "rapport created by *no* derives from the group authority which subordinates the [speaker's] individual desire and intention to those of the group" (p. 432).

⁶ Brown & Levinson (1987) define positive face as "the want of every member that his wants be desirable to at least some others" or, in other words, a person's desire for shared values, including "the desire to be ratified, understood, approved of, liked or admired" (p. 62).

⁷ That these markers are used to reduce speaker responsibility does not mean that the speaker is denying or refusing responsibility for his/her statements, but that the speaker is backing away from the force of an unmitigated personal assertion through a variety of evidential means. In addition, reducing responsibility for an utterance is not the only function of evidential markers in Japanese, but is one way that evidential markers may be used. Evidential markers may also be used for the opposite purpose, that is, to index the speaker's certainty of his/her message or to index the speaker's assumption of complete personal responsibility for the content of his or her utterance. How this occurs in discourse is an important area for further study.

⁸ This rough word count is intended only to give the reader an idea of the length of the corpus.

⁹ In this qualitative study, frequencies are provided for the reader's information only.

¹⁰ These particles are listed as they appeared--commonly occurring combinations have been counted as combinations. Some particles occurred both alone and in combination, but none are counted twice.

¹¹ While the particle *na* alone can be glossed "I wonder," the particle *na* plus the question particle *ka* in the combination *ka na* also means "I wonder." While both *ka na* and *na* can be found in female and male speech, *kashira* marks speech as feminine.

¹² The data in this paper is displayed in the following manner: the Japanese utterances are romanized; the second line contains a word-for-word literal translation (for an explanation of the italicized particles, see Appendix); the third line is a free translation in English.

¹³ In counting utterances, one-word responses, such as "uh-huh" and "yes," were not counted.

¹⁴ This finding is consistent with the findings of a study by the Japanese National Language Research Institute (Kokuritsu Gengo Kenkyuujō, 1955) which found that 73% of predicates in conversation contain sentence-final particles. The figure in this paper includes not only sentence-final particles but other evidentials as well.

¹⁵ A "Face Threatening Act" (FTA) is an act by a speaker which might threaten the positive or negative face of the listener. See Brown & Levinson (1987) for a detailed discussion.

¹⁶ Examples of acts which threaten an interlocutor's negative face wants are orders, requests, suggestions, offers, promises, compliments, expressions of thanks, and excuses. Acts which may threaten an interlocutor's positive face wants include criticism, disagreement, violent emotions, irreverence, non-cooperation, apologies, acceptance of a compliment, confessions, and lack of control over bodily functions or emotions.

¹⁷ See Lave & Wenger (1989) for a discussion of "legitimate peripheral participation" in learning.

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Amy Snyder Ohta holds an M.A. degree in Teaching English as a Second Language from UCLA where she is currently a doctoral student in applied linguistics. She has taught EFL in Japan and teaches both Japanese and ESL in the United States. Her research interests are in discourse analysis, language socialization, second language acquisition, and second/foreign language teaching.

APPENDIX

Abbreviations and Transcription Conventions

!xxx!	increased volume of utterance between exclamation points
(#)	length of a pause in seconds
(())	comment
()	brief pause shorter than 1 second
(xxx)	utterance in parentheses not clearly heard by transcriber
...	ellipsis
:	lengthened vowel
=	next turn begins without any pause
[overlap with the previous speaker
<i>ac</i>	accusative marker
<i>cmp</i>	complementizer
<i>cp</i>	copula
<i>ng</i>	negative
<i>nm</i>	nominative case marker
<i>pot</i>	potential form
<i>prv</i>	provisional
<i>ps</i>	possessive marker
<i>pst</i>	past tense marker
<i>pt</i>	particle
<i>q</i>	question marker
<i>qt</i>	complementizer often used to set off quotations
<i>tp</i>	topic marker

Attention-Getting Strategies of Deaf Children at the Dinner Table

Rachel Locker McKee

Kristen Johnson

Nathie Marbury

University of California, Los Angeles

This study investigates one facet of the language socialization process of Deaf children with Deaf parents, specifically, how they learn to get attention as a speaker in order to participate in an American Sign Language (ASL) conversation. The database consists of a videotape of an hour-long dinner attended by three Deaf children (aged 3-6 years), their two Deaf mothers, and a Deaf researcher. Small segments of the interaction, transcribed from the videotape, show not only successful and unsuccessful attention-getting strategies used by one Deaf child in the group but also adult and peer responses to her novice-like efforts. This child's attempts at getting attention demonstrate that while she could perform many culturally appropriate attention-getting behaviors (e.g., tapping, hand-waving, eye-gaze), she was still in the process of developing awareness of the relative impact of the various strategies and the ability to judge pragmatic conditions appropriate to their use. The mothers' and peers' cooperation helped to facilitate the child's participation, by modelling specifically Deaf discourse strategies for communication in a multi-party setting. This study shows that such modelling enables Deaf children in a Deaf context to become autonomous partners in interaction with their parents and peers at an early age.

OVERVIEW OF THE STUDY

In this small scale study, we will investigate one facet of the language socialization process of Deaf¹ children interacting with their Deaf mothers and peers: how they learn to get attention as a speaker in order to participate in American Sign Language (ASL) conversation. Vision, rather than hearing, is the main communicative channel for Deaf people in an interactive context. Thus, Deaf mothers cannot simultaneously gaze at their children and

carry out their other tasks in life all of the time. Deaf children must therefore learn to master appropriate non-auditory attention-getting strategies in their interaction with their mothers. The situation we have chosen to analyze is that of Deaf children ages 3-6 in an everyday activity setting for conversation: the family dinner.

Schieffelin & Ochs (1986) define language socialization as "both socialization through language and socialization to use language" (p. 2). According to Schieffelin & Ochs (1986) "sociocultural information is generally encoded in the organization of conversational discourse and discourse with children is no exception" (p. 3). We will show that the children in this study are participating in and learning about multi-party discourse and how to communicate according to the sociolinguistic norms of Deaf culture. This area of inquiry is of particular interest since the majority (about ninety percent) of deaf children are born to normally hearing parents. In that situation, the lack of access to a common language and modality for communication between parents and child impedes expected language socialization processes. On the other hand, when deaf children are born to Deaf parents, native language acquisition and socialization into the parents' culture usually proceeds quite normally. We are interested in investigating the language socialization experience of this smaller group of deaf children. First, we want to better understand how attention-getting strategies specific to the norms of the Deaf community are appropriated by these deaf children in their interactions with their mothers and others at the dinner table. Second, we are interested in how their experience parallels the development of conversational competence by hearing children in hearing families.

This investigation draws on concepts of activity theory (Vygotsky, 1978; Leont'ev, 1981; Smith, 1990), particularly how humans master sign systems and then use those sign systems to organize their activity. In language socialization, the gradual acquisition of linguistic "tools" allow social activities and social interaction to be increasingly understood and mediated by the child. In this process, novices "appropriate" linguistic tools while participating in social activities with more competent members of their society. Getting attention is a necessary tool for organizing discourse. This study examines two brief examples of a Deaf child appropriating socially developed ways of using gestural and eye-gaze channels as interactional tools, focusing on strategies for getting attention and taking the floor in conversation.

Another perspective we borrow from activity theory is that activity, as opposed to action, is jointly constructed and that tools,

as we have defined them, are only effective in a cooperative social context. Because the child has to learn to coordinate joint action with adults, "the facts of language acquisition could not be as they are unless fundamental concepts about action and attention are available to children at the beginning of learning" (Foster, 1980, p. 8). We see in our data how the process of attention-getting has to be jointly achieved by children and adults, using and refining culturally appropriate tools for initiating interaction. Indeed, all the examples of participation by novices and experts in our data show how participation is collaboratively structured; that is, the adults' attending behavior can be viewed as the flip side of children's attempts at getting attention or taking the floor.

The Significance of Attention-Getting as a Social Tool

Because attention-getting and topic initiation are intertwined, some definitions of what constitutes topic initiation are relevant to this discussion. Keenan & Schieffelin (1976) point out that the first and necessary step to initiating a topic in conversation is that the speaker must secure the attention of the listener. This step involves the use of some sort of attention-getting strategy to gain or verify the attention of the listener. Hearing children use devices such as pointing (often interpreted as "look," "see") to indicate objects they want the listener to focus on. If both participants focus on the object then it can be assumed that both the listener's general attention and his attention toward the object/tool has been achieved successfully.

Foster (1980) discusses the various channels available to the child for getting attention and initiating topics, labeling them: *vocal*, *gaze*, and *movement*. The *vocal channel* refers to utterances that are part of the adult linguistic system, the child's own version of linguistic forms not recognizable as adult forms, and sounds involved in communication but unrelated to emerging linguistic systems such as cries, laughing, etc. In ASL, the vocal channel is replaced by the gestural modality, in which both non-linguistic gestures and lexical signs are produced.

The *gaze channel* is typically used by hearing children in two ways: checking for the mother's attention and gazing at the topic of interest. Beginning with the second year of age, children check to see if they have their mother's attention and will react accordingly. For example, if they discover that their mother is not attending to them, then they may choose to implement any one of several attention-getting strategies that they have learned. The second use of the gaze channel is gazing at the topic of interest until the

addressee's attention is directed at it. Both of these strategies are also evidenced in our study. However, the use of gaze as an attention-getting strategy is developed somewhat differently in the case of Deaf children, in response to their mothers' visually oriented interaction behaviors. Erting, Prezioso, & O'Grady-Hynes (1990) observe that Deaf mothers display strategies suited to a visual-gestural environment for getting and maintaining an infant's attention and for focusing its attention on signing as an activity. These strategies include physically orienting the infant so it can attend to signed communication, moving signing into the infant's visual field, and gazing directly at the infant. Thus, the model for later social language behavior in a visual-gestural language, using gaze as a principal tool, takes a culturally specific form in the early stages of life for Deaf children with Deaf parents (Erting et al., 1990).

Foster's *movement channel* has three possible uses: 1) gesture and facial expression, which are usually used in culture-specific ways; 2) action/gestural use of movement, in which there may be no clear distinction between action and gesture; and 3) non-communicative actions, such as those used to manipulate an object. Foster (1980) shows that actions used gesturally (e.g., pointing, showing, giving) emerge at the beginning of the second year and coincide with the genesis of language development, suggesting that there is an involved, emerging capacity for symbolic communicative behavior which is underlying both developments. As language begins to develop, gestural communication becomes secondary to it yet still continues to be an important part of the child's communicative system. In the Deaf context, a similar process develops, but the child's gestures typically become either refined as socially meaningful conversational signals or redefined as lexical signs in the child's grammatical system, since there is a modality overlap between gesture and language in the case of ASL (Pettito, 1983). Next we will turn to a brief description of strategies used by Deaf adults for getting attention and taking the floor in ASL conversations.

GETTING ATTENTION IN THE DEAF COMMUNITY

Conversation Regulators in ASL

Deaf conversational competence requires an awareness of where the eyes are looking, for both speaker and addressee, and where the hands are located. The single most important regulator in conversation is eye-gaze, because it determines the boundaries of when one can "speak" and be "heard." This is quite distinct from speech acts in spoken languages, where at least audition, if not active attention, can be assumed just by the act of speaking. The other important factor in ASL conversation is the position of the hands in relation to the signing space (the neutral space immediately in front of the signer's torso between waist level and the top of the head). Moving one's hands into the signing space shows a desire to begin or continue talking.

Baker & Cokely (1980) describe certain acceptable ways to get attention in Deaf culture. When an addressee is close by, a small wave of the hand in his direction or a light tap on his arm or shoulder is appropriate to get his attention. If participants are seated at a table, the potential speaker can knock or lightly bang on the table and the vibrations will let the addressee know that someone wants his attention. When speaker and addressee are farther away from each other (e.g., across a room), a larger hand-wave (either up and down or sideways) is used to attract the addressee's attention. In a setting with many participants, such as at a party or in a classroom, flicking the light switches on and off rapidly is a widely understood signal for everyone to stop conversing and direct their eye-gaze to a speaker.

Another strategy that is frequently used is to get the attention of a third party nearer to the addressee and request that person to tap or wave at the addressee and direct his attention (by pointing) to the person who wants to speak. This kind of facilitation is very common behavior in multi-party situations in the Deaf community, even where the physical distance between participants is not great (e.g., around a table). It is an efficient system to cooperatively ensure that the necessary eye-gaze is achieved between potential interlocutors, a task which could otherwise be complicated in many situations.

Once a speaker has the floor, the addressee is expected to maintain eye-gaze in the direction of the speaker. The speaker may prevent the addressee from interrupting by averting his eye-gaze

while signing, thereby holding the floor, since the addressee may only start signing after establishing eye contact. One way that the addressee can signal that he wants to interrupt or talk is to move his hands up into the signing space, even to wave, point to, or touch the speaker if he refuses to end his turn (Baker & Cokely, 1980). An aggressive way to get the floor is to simply start signing, repeating the first few signs until the speaker looks and gives up the floor, much the same way that hearing speakers "shout each other down" with overlapping turns in a discussion or argument.

Turn-Taking and Eye-Gaze

In Deaf interaction, communication is conducted in a visual medium; consequently, the rules for conversational interaction are constrained principally by direction of eye-gaze. In spoken languages, strategies for turn-taking and discourse organization tend to depend on vocal signals, such as rising or falling pitch at the end of a clause, elongation of a final syllable, or the use of stereotyped chunks such as "you know" to indicate the end of a turn. Goodwin (1981) has investigated the functions of eye-gaze in the facilitation of speaker-hearer cooperation in spoken language. He argues that "gaze is not simply a means of obtaining information, the receiving end of a communications system, but is itself a social act . . . the gaze of a speaker toward another party can constitute a signal that the speaker's utterance is being addressed to that party. Similarly, the gaze of another party toward the speaker can constitute a display of hearership" (p. 30).

This observation is even more significant in relation to Deaf culture. Mather (1987) emphasizes the point "that signed discourse differs from spoken conversation in that a Deaf speaker cannot initiate signing until the specified addressee is looking at the would-be speaker. A person cannot say something and be heard if the other person is not watching. This constraint makes eye-gaze one of the most powerful regulators in sign language, because it categorically determines when a speaker can sign" (p. 13). The distribution of eye-gaze in a Deaf communication situation differs in both form and meaning from that found in American hearing culture (Baker, 1977; Baker & Cokely, 1980). For example, Mather (1987) distinguishes between two eye-gaze signals: *I-Gaze* and *G-Gaze*. *I-Gaze* is a mutual eye-gaze between the speaker and an individual addressee. This gaze is held until the speaker finishes or until the addressee replies. *G-Gaze*, on the other hand, is a "group-indicating gaze" whose purpose is to signal a group of two or more

participants that the speaker is treating them as a unit. Additionally, Prinz & Prinz (1985) identify three types of eye-gaze between speakers and addressees used during Deaf conversations: rapid, sustained, and prolonged. These are used in the getting/giving of attention and maintaining conversational turns.

Discourse Violations by Novices

The strategies described above are normal conversational conventions of Deaf adults who are a part of Deaf culture. They are often violated by hearing people learning sign language who are not aware of discourse rules, particularly the subtleties of ASL turn-taking. This situation is not unique to ASL learners; as Gumperz (1982) points out, it is usual with second language speakers that sociocultural knowledge such as discourse structures lags behind linguistic knowledge, causing numerous misunderstandings in cross-cultural communication. The kinds of mistakes typically made by hearing learners of ASL include: beginning to sign without ensuring that the audience has directed its eye-gaze to the speaker, using exaggerated waving or waving too close to someone's face, stamping or banging inappropriately, touching the addressee in the wrong area of the body (for example on the leg, which is reserved for those who are close or intimate friends). Novices are also sometimes impatient about waiting for the addressee to be ready or able to pay attention, since hearing people are not used to the constraint of not being able to easily talk and do other things at the same time. Interrupting is also difficult for hearing learners of ASL to accomplish appropriately, i.e., to know when and how it is acceptable to enter into a conversation.

Such inappropriate conversational behaviors in learning signers are readily observable in cross-cultural encounters between Deaf and hearing individuals. What is more interesting, as evidenced by the data in this study, is that young Deaf children with their parents make very similar mistakes, even though they appear to have a basic grasp of the range of strategies involved in initiating conversation. In a cross-sectional study of 24 Deaf children's peer interaction, Prinz & Prinz (1985) found that Deaf children at play between the ages of 3;10 and 11;5 years exhibited a range of conversational behaviors which approximated those of Deaf adults to varying degrees. They reported evidence of a parallel process of development to hearing children acquiring increasingly sophisticated strategies for getting attention and negotiating turns and interruptions. In Prinz & Prinz's (1985) study, the youngest

children exhibited rudimentary attention-getting behaviors, such as tugging and pulling the addressee's clothing, which appear comparable to young hearing children's tendency to repeat themselves persistently or yell inappropriately until they gain the desired attention.

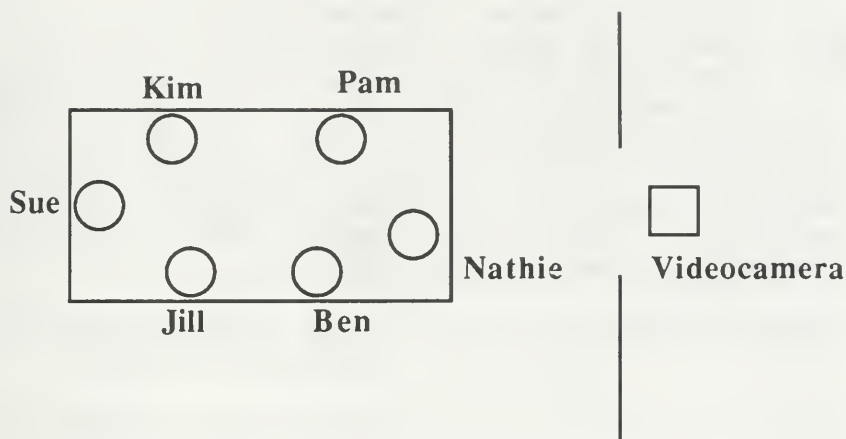
Timing of Attention-Getting and Taking the Floor

Sacks, Schegloff, & Jefferson (1974) discuss the importance of timing in conversational organization. They find that minimal overlap in conversation seems to be a preferred norm in discourse and that gaps which do occur between speakers are as brief as possible. Sacks, Schegloff, & Jefferson call this phenomenon "precision timing" and claim that it is possible only if speakers can anticipate each other's termination points. They show that overlap normally occurs at "transition relevant points," that is, listeners usually overlap with speakers at points which would be plausible stopping places in the talk of speakers.

Mather (1987) mentions that the proper timing of turn-taking exchanges is also important in ASL and requires signers' ability to read and respond to another's conversational regulators. Prinz & Prinz (1985) found specifically that overlap in the timing of utterances in conversations of older Deaf children was much smaller than overlap observed in the talk of younger Deaf children, demonstrating a progression of discourse skills found with hearing children. Our data show instances of young Deaf children struggling with the boundaries for overlap and interruption when trying to get attention in a conversation.

DATA COLLECTION

Our data base for this study consists of a videotape of a dinner conversation lasting approximately an hour, with three Deaf children, their two mothers, and a Deaf researcher. The mothers in this study are white, Deaf, college-educated Americans whose primary language is ASL. The participants are Sue (3 years), Ben (5 years), their mother Pam, Kim (4 years), her mother Jill, and Nathie, the researcher. (The names of all participants except Nathie have been changed.) The two families know each other well and share in many activities, including school, work, and social activities. The researcher is also a friend of both families. The



examples given in our discussion are drawn from two very short segments of interaction during the dinner, both of which focus mainly on Sue, the youngest child, and her attempts to get attention as a speaker (the segments appear in full in the Appendix). We chose to focus on these segments, totaling less than one minute, because they are rich in a variety of behaviors in which we were interested: the use of eye-gaze and other conventionalized attention-getting signals in ASL. Furthermore, these particular segments show both successful and unsuccessful use of these strategies by the child as well as the consequences in terms of adult and peer responses.

The following diagram shows the spatial arrangement of participants at the dinner table:

Transcription Notes

The transcription system used in this study is adapted from Foster's (1980) representation of verbal and non-verbal interaction between young children and their mothers. All of the examples used in this analysis² show the interaction of at least two participants, with four channels of communication shown for each:

- E = eye-gaze
- S = signs (lexical)
- G = gesture
- M = movement

We use gesture here to mean an action with communicative purpose (e.g., tapping on the shoulder), as opposed to movement which includes non-interactive actions and other behaviors, such as eating.

The transcription should be read from left to right, representing the passage of time. When read vertically, the transcription shows speech, actions, etc. occurring in relation to each other as time goes on. According to published transcription conventions for ASL (see *Sign Language Studie* journal), the following code is used to represent ASL signs:

YUMMY (capitalized)	=	an approximate gloss (English equivalent) for a sign
+	=	a reduplication or repetition of the sign, (e.g., YUMMY +++) where the same sign is repeated three times (in this case to show degree of intensity)
_____q (above sign glosses)=		(facial) grammatical marking for a yes/no question
_____wh-q (above sign glosses)=		(facial) grammatical marking for a Wh-question

DATA ANALYSIS

Timing of Interruptions

In our data, three-year-old Sue's attempts to take the floor cause overlaps but usually not at timely transition points in the conversation (Sacks et al., 1974). In Example 1, Sue attempts to get the attention of Jill (the other mother) when she is already engaged in an ongoing conversation with Pam, Sue's mother. A more timely transition point for an interruption would have been at a natural pause in the conversation, signalled by lowered hands or the disengagement of the participants' mutual eye-gaze:

Example 1

Jill and Pam already engaged in conversation about their work. Gazing directly at each other.

S U E	E-----on Kim----- on plate-----
	S YUMMY+++++
	G touches Kim's hand with left hand waves/bangs table----
	M lifts fork to mouth wriggles body and head
	Translation: Yum yum I like this!
K I M	E--on plate----- on Sue-- on plate-----
	S
	G
	M eating -----

Jill and Pam still in conversation, mutually gazing. Jill has a fork in hand.

S U E	E---to right on table--- on Jill----- on Kim-----
	S YUMMY++++ YUMMY+++
	G bangs table--- pats Jill's hand 2 times bangs table----
	M
	Translation: Yum yum yum! Yum yum yum!
K I M	E--on plate----- on Sue-- on plate----- on Sue-----
	S SEE CAN'T
	G waves hand bangs table---
	M
	Translation: She can't see you.

As described earlier, according to Deaf conversational norms the floor can only be taken by a new speaker if eye-gaze is granted by the current speaker, even though minimal overlap may still occur between turns (Baker & Cokely, 1980). In Example 1, Sue goes ahead with her interruption and does not succeed immediately in getting the desired attention, Jill's eye-gaze is fixed on another speaker and the other speaker is still signing. An incompetent speaker, according to Ervin-Tripp (1979), "would not gaze at or orient to partners, would display random gaps and overlaps in conversation, and would talk about objects and thoughts at whim without any regard to what has just been said" (p. 391). Like hearing children of the same age studied by Ervin-Tripp (1979), many of Sue's contributions while attempting to take the floor are quite irrelevant to other talk or redundant, e.g., Sue's comment here, *Yum yum yum*, which is relevant to the context of eating but not related to the adults' discussion at the table about their work. Sue's attempts at entering the conversation do not qualify as competent, despite her ability to command attention using culturally acknowledged signals, since there was no reciprocal gaze available initially, nor any relation between Sue's comment (*Yum yum yum*) and the ongoing conversation.

We observe however, that unlike hearing children whose attempts to get attention may be heard, evaluated, and ignored because of their lower status or irrelevance (Ervin-Tripp, 1979), the Deaf children in these data were rarely ignored in their attention-getting acts. It may be that Deaf parents (at least those observed by us in the United States) are less likely than hearing parents of hearing children to ignore their children's attention-getting signals, since in a visual modality one must physically pay attention by looking at the speaker in order to judge whether the child's utterance is relevant or worthy of attention. Presumably there are mechanisms other than being ignored which enable the child to evaluate the relevance of his/her contributions, since eye-contact is essential to show attention or noticing but doesn't always ratify an attempt to take the floor. The patterns of caregivers' attending signals with young Deaf children in a range of activity contexts would be an interesting area for further study.

Matching Strategies to Situations

Throughout these interactions, Sue uses a range of strategies in attempting to take the floor, including directed eye-gaze, banging the table, arm tapping, hand waving, and vocalizing. Problems

arise, however, when her strategies do not match situational factors, such as the distance of addressee, the current direction of the addressee's gaze, or other competing actions in progress at the time, (e.g., eating). As outlined previously, in Deaf culture (as elsewhere), the choice of attention-getting strategies depends on several factors in the situation, including, for example, familiarity, location of participants, or the relative formality of the situation. Within each context, there are usually several choices which have varying degrees of impact, parallel to the way hearing people can raise or lower the volume of their voice to get attention if first attempts to get the attention of an addressee do not succeed. In the context of a Deaf dinner, there is a conventional range of possible ways to get attention which are tried in ascending order from least conspicuous, such as eye-gaze, or discreet hand wave, to the most conspicuous, such as a large hand wave or banging on the table until a response is achieved. Sue's attempts at getting attention demonstrate that while she can perform many of these behaviors, she may not be fully aware of the relative impact of the different strategies or be able to judge the pragmatic conditions appropriate to their use. In Example 2, instead of making a subtle wave or light tap on the shoulder or arm of her addressee, she bangs on the table in her first attempt to get Jill's attention even though she is right next to her. This type of behavior recurred in our data and suggests that Sue favors using the "loudest" strategy as an effective, if not sanctioned, method of getting immediate attention. (Both adults tell Sue to stop banging the table for attention on several occasions throughout the dinner.):

Example 2

Kim and Pam are engaged in conversation. Jill is eating and watching Kim and Pam.

S U E	E-----on Kim----- on Jill-----	
	S	MEAT MEAT
	(Pam and Kim end conversation)	
	G	bangs table near Jill---- taps Jill on hand points to open mouth
	M	
Translation:		The meat. (Look at the meat in my mouth.)
J I L L	E on Pam and Kim----- on Sue-----	
	S	
	G	
	M	eating-----

impact strategy (banging table) act one. Sue demonstrates this. Jill lifts her fork to her mouth, intrusive (and more successful by Jill's line of view or to wait for her g. Nevertheless, her second try is more successful than the initial er attention after this.

ing the situation with the strategy
get Nathie's attention from the
ample 3. In this case Nathie's
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It should be noted that directly
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in a Deaf conversation. The use
nce usually accompanies gaze at a
g to the speaker, as a cue for that
n of the desired recipient. It is
ident that, when her own efforts
pts or is guided into this behavior

Following are contiguous)

.....on Nathie.....

bangs on table near Jill-----

.....

Pam, Jill , Kim and Nathie are eating.

S U E	E	on Nathie-----
	S	ME WANT
	G	bangs table----- (4th bang)----- (6th bang)-----
	M	
	Translation:	I want ...
J I L L	E	on plate----- on Sue----- on plate-----
	S	
	G	
	M	eating -----

Kim and Pam continue to eat and glance occasionally at Sue and Jill.

S U E	E	on Nathie----- on Jill----- on Nathie-----
	S	NATHIE WANT
	G	bangs table--- (9th bang)- waves hand
	M	
	Translation:	(Get) Nathie ('s attention). I want... (meat?)
J I L L	E	on plate----- on Sue----- on Nathie---
	S	WANT NATHIE WANT NATHIE Index Sue
	G	
	M	
	Translation:	Do you want Nathie? (Look at Sue)

Getting and Assessing Attention

In all of these interactions, Sue displays basic conversational savvy through her tenacity in attempting to secure the attention of an audience (but not necessarily the desired one) before she proceeds to talk. Atkinson (1979) notes that this is one of the earlier communicative competencies to emerge in young children, even at and before the one-word stage, by "using the name of the object and paralinguistic gesture in order to make sure that the adult is attending to what he, the child, is interested in. Only when this condition

obtains will he go on and say something about the object in question" (p. 240).

Sue seems to be able to gauge the necessity of getting attention before talking, as in Example 4, where she works to get 4-year-old Kim's attention before starting, by tapping her hand. This segment occurs at the very beginning of an interactional sequence (see Example 1). Sue is trying to get Kim's attention in order to comment on the food they are eating:

Example 4

Jill and Pam already engaged in conversation about their work. Gazing directly at each other.

S U E	E	-----on Kim----- on plate-----
	S	YUMMY+++++
	G	touches Kim's hand with left hand waves/bangs table---
	M	lifts fork to mouth wriggles body and head
	Translation:	Yum yum I like this!
K I M	E	--on plate----- on Sue-- on plate-----
	S	
	G	
	M	eating -----

However, these data suggest that what is yet to be fully developed in her conversational repertoire is judgment about when she has secured the full attention of an addressee. Sue's difficulty in monitoring the attention signals (i.e., gaze) of others might account for her tendency to use overly emphatic strategies for getting attention and taking the floor, as she tries to ensure that she will be "heard" without the competence to assess when she legitimately has the floor. In Example 4, after tapping Kim's hand and establishing mutual gaze, Sue extends her attention-getting behavior to hand-waving after she already has Kim's attention. Similarly, in Example 5, after being assisted by Jill when trying to get Nathie's attention from the opposite end of the table, Sue continues to wave at Nathie after she has her direct gaze rather than begin her turn at talking:

Example 5

Kim and Pam continue to eat and glance occasionally at Sue and Jill.

S
U
E
E on Nathie-----|on Jill-----|on Nathie-----
S NATHIE WANT
G bangs table---(9th bang)-| waves hand
M
Translation: (Get) Nathie ('s attention). I want... (meat?)

J
I
L
L
E on plate-----|on Sue-----|on Nathie-----
S q
WANT NATHIE WANT NATHIE Index Sue
G
M
Translation: Do you want Nathie? (Look at Sue)

S
U
E
E on Nathie-----|on plate-----
S ME points to open mouth MEAT points to plate ME WANT
G waves hand at Nathie---|
M
Translation: I want more meat.

J
I
L
L
E on Sue---| on plate-----
S NATHIE (index to right)
G
M picks up fork and eats
Translation: There's Nathie.

N
A
T
H
I
E
E on Sue-----
S wh-q
WHAT
G
M
Translation: What? (I'm paying attention)

Such redundancy (in the sense that the hand-waving is continued beyond the minimum necessary point) is not unusual in a novice but would definitely be considered unusual if exhibited by a Deaf adult.

Selecting Specific vs. General Recipients for Attention

Sue appears to have several attention-getting devices at her disposal (directed eye-gaze, waving, tapping, banging), but, as shown above, her attempts at getting attention indicate that she is still learning how to select these devices effectively for the context. The data also suggest that she is not always able to coordinate different channels, such as eye-gaze and waving in the same direction to a specific addressee, as was seen in Example 2, where she is banging the table to her right and gazing to the left.

An alternative interpretation of this behavior is that Sue is not sure whose attention she wants; she knows that in general she wants an audience, but has not made the recipient explicit. Keenan & Schieffelin (1976) point out that this is a problem which can also face hearing adults in multi-party situations, but it is more acute for children who "(n)ot only must . . . learn to secure the attention of the listener, but when several potential respondents are available, they must select explicitly" (p. 357).

In this study we see Sue being socialized into this skill of recipient selection, both by a peer and by adults. In Examples 4 and 5, in her efforts to get Nathie's attention and address her specifically, Sue's first strategy is ineffective as it is not clearly directed towards a specific person, even though she is attracting general attention to herself by her large hand-waving. Sue is then assisted by Jill who by this time is gazing at Sue because of her undirected attention-getting behavior. Jill apparently interprets from Sue's focused eye-gaze who her intended addressee is, checks on that person's (Nathie's) availability, and then signs her name and points to her while looking at Sue. In other words, Jill is cueing her to go ahead and start her talk to Nathie, which Sue then does. This particular incident raises the notion of "guided participation" (Rogoff, 1989) evident in the interaction between Jill and Sue.

Guided Participation as a Speaker

Rogoff (1989) discusses the collaborative structuring of problem solving in the interaction of mothers and their children, proposing that mothers or caregivers in various cultures structure children's activities to help them achieve their goals, according to their level of competence in a particular situation. In the sense that talk is an activity, and getting attention to take the floor is a goal within it, we see examples in these data of adults and children structuring or modifying the activity to help Sue become a

conversational participant. Rather than ignoring Sue's efforts to assert her speaking rights, regardless of the timeliness or relevance of her contribution, she is actually assisted and monitored in her attention-getting attempts by adults and an older peer. This observation is consistent with Schieffelin & Ochs' (1986) contention that middle-class American parents' interaction with young children shows a high degree of accommodation to the less competent participant (unlike some non-Western societies in which the child is expected to accommodate). Data in this study suggest that Deaf and hearing American parents are somewhat similar in their orientation to socializing young children.

In the interaction in Example 1, Sue tries unsuccessfully to get Jill's attention to make a comment, and she is quickly guided by an onlooking peer. The slightly older child, Kim, informs her that Jill can't see her. Kim has apparently ascertained who Sue's intended addressee is by her eye-gaze, checked the gaze of the intended recipient, and gives Sue an explanation as to why her strategy is ineffective.

In Example 5, third-party assistance to Sue in taking the floor is offered in the form of monitoring and modelling. In this case Jill is guiding the child towards an alternative means of initiating conversation with an addressee through the facilitation of a third party. The child at age 3 may already know that she cannot begin to talk until eye-gaze is established but is not yet proficient in attaining that goal by her independent actions. Normally, in using the aid of a third party to get the attention of an addressee, a Deaf adult would specify to the facilitator exactly whose attention was desired by pointing to or naming the addressee (e.g., "please tap Nathalie for me" or "I want to talk to the person next to you please"). In Example 5, the child shows an incomplete command of this strategy simply by demonstrating (by undirected hand-waving) that she wants attention, fixing her eye-gaze on Nathalie (the intended addressee), and signing her name. Jill is able to infer the child's intention to speak to Nathalie and asks her if she wants Nathalie. Jill then checks on Nathalie's eye-gaze and directs Nathalie's attention to Sue by pointing at the child. Finally, Jill looks at Sue and points to Nathalie, in effect giving the floor to Sue. Presumably, the child is learning that it is acceptable to seek assistance in establishing reciprocal eye contact to initiate a conversation. Sue is encouraged to learn the appropriate sequence by the adult's expansion of her incomplete cue. Ochs & Schieffelin (1984) note the frequent role of adults in facilitating children's participation in verbal activities in general, including expansion of the child's utterances into an event-

appropriate contribution. In this context, the adult facilitates the child's participation by becoming a tool in the child's interaction, and thus the attention-getting attempt becomes a joint activity (Leont'ev, 1981). The adult's cooperation also models a specifically Deaf discourse strategy for achieving successful communication between speakers and addressees in a multi-party setting.

CONCLUSIONS

The interactions examined in this study reflect Rogoff's (1989) notion of guided participation of novices and an activity theory perspective on the collaborative nature of talk. We observed that in the process of socializing Deaf children to get attention and take the floor in conversation, there are at least two main tasks or sets of tools to be appropriated by the child. The first is simply to have control of culturally recognized behaviors in gaze, gestural, and linguistic channels (i.e., gazing, tapping, waving, signing). Our main subject, Sue, appeared to have a basic command of all these signals although this repertoire alone wasn't enough to enable her to always get attention as she intended. The second and more complex task is for the child to be able to select an appropriate attention-getting strategy for each interactional context she encounters, taking into account pragmatic factors such as the number, placement, proximity, relationship, and other activities of participants. The main indication of Sue's novice status as a conversational participant was her use of attention-getting strategies which were more emphatic than those considered appropriate by adults, a practice which might be true of children in other cultural contexts as well. Sue appears to be in the "zone of proximal development" with respect to this competency (Vygotsky, 1978). By this we mean that she can sometimes achieve her goal of getting attention independently, but her efforts are more successful when assisted by more expert participants. The collaboration between novice and experts in these interactions suggests a guided process of development in which Sue is learning to use and assimilate more adult-like strategies for social interaction. In any society, members have to acquire strategies to communicate in a wide range of contexts; this example of Sue acquiring the skills of getting attention and taking the floor as a speaker in Deaf culture is no exception.

The socialization of attention-getting as demonstrated in this study involves monitoring, guidance, and ratification by other participants with respect to Sue's efforts at getting attention.

Our second point is that this study allows us to see how similar communicative resources available to the young child may be appropriated and shaped differently as interactional tools in different cultural settings. By this we mean that young children in all cultures have channels such as eye-gaze and gesture available to them (with the exception that in a Deaf context the vocal channel is not usually available as a resource). Our data show that when communicating in ASL through a visual-gestural modality, the use of eye-gaze and gesture evolves into conversational behaviors which have specific significance as strategies for participating in conversation (i.e., getting attention, in this case). In addition, the modality or social context also determines what assumptions can be made by speakers about attending or ignoring. For example, in Deaf culture, attention must be attained and expressed explicitly through directed eye-gaze, and this may often be accomplished cooperatively between a prospective speaker and other participants who are not the intended recipients but are active "bystanders" (Goffman, 1981).

This description of the joint socialization of novices into culture-specific attention-getting strategies brings us back to Leont'ev's concept of tools as socially developed ways of using forms. In a similar vein, Engeström (according to Smith, 1990) contends that tools allow us to act productively and that people empower themselves through developing productive capabilities. This idea seems especially applicable to a study of language socialization, where we can see a Deaf child acquiring the productive language skill of entering or initiating a conversation, a skill which allows her to engage with others in her social environment.

Finally, we believe this study of how Deaf children are socialized as conversational participants has relevance to the issue of empowering them as communicators. Since this situation of native socialization is the exception rather than the norm for Deaf children, children such as those in this study probably have a more empowering start to life than most Deaf people. The children in this study are encouraged to take their place as competent participants in everyday talk and are learning to expect that they can manipulate linguistic tools to communicate and be responded to in reciprocal ways. Deaf children in hearing families, on the other hand, usually interact less with their mothers and are much less likely to initiate communication than either Deaf children with Deaf mothers or hearing children with hearing mothers (Meadow, Greenberg, Erting,

& Carmichael, 1981). Furthermore, the language they experience is frequently directed *at* them and is controlling rather than dialogical (Schlesinger, quoted in Sacks, 1989, p. 68). This pattern seldom enables Deaf children of hearing parents to acquire the tools for becoming autonomous partners in interaction with their parents or siblings as pre-schoolers.

In view of this reality, it seems important to examine the details of how these competencies are successfully acquired by Deaf children in a native signing context, so that such insights can be shared with those who interact with young Deaf children as agents of language socialization (such as hearing parents and educators). Hopefully, a better understanding of how talk is organized in a Deaf context (according to the constraints of a visual-gestural medium) will contribute to the process of empowering other Deaf children who are without the benefit of native socialization experiences.

NOTES

¹ *Deaf*, with an upper-case "D," refers to people who are members of a community sharing the language of ASL and a set of cultural values, practices, and perceptions about the world. *Deaf*, then, infers cultural and linguistic identity, whereas lower-case *deaf* refers only to the audiological status of having impaired hearing (Padden & Humphries, 1988). Subjects in this study are *Deaf* in the cultural sense and use ASL as their primary language.

² See Appendix for a complete transcript of the two (non-contiguous) interaction episodes used in this study. Examples represented in the text are mini-segments taken from within each of the two interaction episodes.

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Rachel Locker McKee is a doctoral student in Applied Linguistics at UCLA, from where she also received an M.A. in TESL. She has worked as a sign language interpreter in her native New Zealand and in the United States and is currently employed under a federal grant at California State University,

Northridge as a curriculum developer for interpreter education. Her research interests are in descriptive and discourse analyses of signed languages, the acquisition of sign language, and the interpreting process.

Kristen Johnson received an M.A. in English at California State University, Northridge and a second M.A. in Anthropology at UCLA. She is currently collecting data for her Ph.D. research in Anthropology at UCLA. Her interest focuses on culturally-related issues of deafness, such as miscommunication between hearing and Deaf people in classroom settings, Deaf socialization practices in the home and school, and narratives in family interaction.

Nathie Marbury, a doctoral student in Applied Linguistics at UCLA, holds two M.A.s: one in Special Education and one in Educational Administration and Supervision. She has taught American Sign Language and English at Kendall Demonstration Elementary School in Washington, DC and is now the ASL specialist at the California School for the Deaf in Fremont. Her research interests are the acquisition of ASL and English by deaf children of deaf parents, discourse analysis, and storytelling techniques.

APPENDIX

INTERACTION 1 (19 seconds)

Jill and Pam already engaged in conversation about their work. Gazing directly at each other.

E-----on Kim----- on plate----	
S	
U S	YUMMY+++++
E	
G	touches Kim's hand with left hand
	waves/bangs table----
M	lifts fork to mouth
	wriggles body and head
Translation:	<i>Yum yum I like this!</i>
E--on plate----- on Sue-- on plate----	
K	
I S	
M	
G	
M	eating -----

Jill and Pam still in conversation, mutually gazing - Jill has a fork in hand.

E---to right on table---|on Jill-----|on
 Kim-----
 S
 U S YUMMY+++ YUMMY+++
 E
 G bangs table---| pats Jill's hand 2 times bangs
 table---
 M
 Translation: Yum yum yum! Yum yum yum!
 E-on plate-----|on Sue--|on plate-----|on Sue---

 K
 I S
 SEE CAN'T
 M
 G waves hand bangs
 table---
 M
 Translation: She
 can't see you.
 Now Jill turns her gaze to Sue.
 Kim and Pam eating and watching interaction between Jill and Sue.

E-----on Kim-----on Jill-----|on plate-----|on Jill-----

 S
 U S YUMMY+++ YUMMY++++++
 E
 G bangs table-----
 M
 Translation: Yum yum! Yum yum yum!
 E on Sue---|on Kim---|on Sue-----

 J
 I S
 L
 L G
 M

Pam is eating. (Kim's interaction is blocked on the camera by Pam.)

S U E	E---on Nathie--- on Kim-----
	S YUMMY++
	G
	M
	Translation: <i>Yummy!</i>
	E---on Sue-----
K I M	S
	G bangs table
	M

Kim is eating and watching the whole interaction.

S U E	E---on Jill----- on Pam----- on plate-----
	S "CHOKE"-----holds the sign-----
	G nods
	M
	Translation: <i>Yuck!</i>
	E---on Sue----- on plate---- on Pam----- on Sue-----
J I L L	S
	G
	M
	E---on Sue-----
P A M	S <u>YOU LIKE+ INDEX plate</u> ^a
	G waves hand at Sue
	M
	Translation: <i>Do you like it?</i>

INTERACTION 2 (Later in the dinner, 16.7 seconds)

Kim and Pam are engaged in conversation. Jill is eating and watching Kim and Pam.

	E-----on Kim----- on Jill-----
S	
U S	MEAT MEAT
E	(Pam and Kim end
conversation)	
G	bangs table near Jill---- taps Jill on hand points to
open mouth	
M	
Translation:	The meat. (Look at the
meat in my mouth.)	
E	on Pam and Kim----- on Sue-----
J	
I S	
L	
L G	
M	eating-----

Kim and Pam eating and watching interaction between Jill and Sue.

	E-----on Jill----- on plate----- on Jill-----
S	
U S	ME EAT MEAT WANT ME WANT
E	
G	
M	
Translation:	I am eating meat. I want some more.
E	on Sue-----
J	
I S	points to plate EAT MEAT LIKE YOU?
points with thumb	
L	
L G	
M	
Translation:	Do you like that meat?

Kim and Pam are eating.

	E	----	on Jill-----	-----	on Nathie-----
S					
U	S				
E	G	nods head			bangs on table near Jill-----
	M				
	E	on Sue-----		on plate-----	
J					
I	S			GOOD	
L					
L	G				
	M				
	Translation:			<i>That's good!</i>	

Pam, Jill , Kim and Nathie are eating.

	E	on Nathie-----	
S			
U	S		ME WANT
E			
	G	bangs table-----	(4th bang)----- (6th bang)-----
	M		
	Translation:		I want ...
	E	on plate-----	on Sue----- on plate-----
J			
I	S		
L			
L	G		
	M	eating -----	

Kim and Pam continue to eat and glance occasionally at Sue and Jill.

	E	on Nathie----- on Jill----- on Nathie-----	
S	S		
U		NATHIE	WANT
E	G	bangs table---(9th bang)-	waves hand
	M		
	Translation:	(Get) Nathie ('s attention). I want... (meat?)	
	E	on plate----- on Sue----- on Nathie-----	
J			^q
I	S	WANT NATHIE	WANT NATHIE
L			INDEX Sue
L	G		
	M		
	Translation:	Do you want Nathie?	(Look at
Sue)			

E on Nathie-----|on plate-----

 S
 U S ME points to open mouth MEAT points to plate
 ME WANT
 E
 G waves hand at Nathie---|
 M
 Translation: *I want more meat.*
 E on Sue----| on plate-----

 J
 I S NATHIE (index to right)
 L
 L G
 M picks up fork and eats
 Translation: *There's Nathie.*
 N E on Sue-----

 A wh-q
 T S WHAT
 H
 I G
 E
 M
 Translation: *What do you want? (I'm paying attention.)*

Scientists' Orientation to an Experimental Apparatus in Their Interaction in a Chemistry Lab¹

Maria M. Egbert

University of California, Los Angeles

This study explores the relationship between scientists' orientation to one another and to an experimental apparatus, analyzing as data a videotaped authentic interaction among co-workers in a chemistry laboratory. It demonstrates how the scientists display systematic orientation to the apparatus as their common spatial point of reference on the one hand and as the physical embodiment of the experiment on the other hand.

INTRODUCTION

In this paper I will demonstrate that there is a systematic relationship between how scientists in a chemistry laboratory display orientation to each other and to an experimental apparatus. I will show in what way the scientists' organization of their eye-gaze and body alignment is different from mundane face-to-face interaction in relation to the coparticipants' shifts in spatial positionings vis-à-vis the experimental apparatus within the setting of a science lab while the scientists go through different sequences prior to and during the initiation of an experiment. Whereas other researchers have demonstrated that the interplay between vocal and non-vocal actions is systematic (C. Goodwin, 1981; Schegloff, 1984; Heath, 1986), the relationship between interactants' orientation towards an apparatus and to each other has not yet been investigated.

The interactants' orientation to the apparatus as their common point of spatial reference will be shown within one participant's simultaneous vocal and non-vocal actions, among coparticipants, and across competing interactions. Furthermore, I will argue that the scientists orient to the apparatus not only as a spatial reference point but also as the physical embodiment of the

experiment. When one experimenter challenges the other experimenter's set-up of the apparatus, the latter displays through his vocal avoidance strategy and through his physical turning away from the apparatus that he is orienting to the experimental set-up as the physical instantiation of the experiment.

The analysis of interactional practices, such as the organization of eye-gaze relative to talk-in-interaction, is part of an endeavor of various disciplines engaging in describing and explaining the landscape of human behavior, among them sociology, linguistics, and anthropology. Conversation analysts have discovered systematicity and orderliness with respect to how participants in an interaction utilize conversational practices and how coparticipants make sense of the interaction they are engaged in. Working within the framework of conversation analysis (CA), this study investigates how coparticipants display orientation to one another's vocal and non-vocal action in relation to the sequence in which an action is performed. I will demonstrate, for example, that an interactant's looking at an experimental apparatus is attended to differently by his coparticipant depending on the sequential environment in which it is embedded.

METHODOLOGY

In this section I will provide a brief introduction to conversation analysis. Then, a description of the data will offer ethnographic information about the type of data being analyzed, the locus of data collection, the participants in the interaction, and some technical background pertaining to chemistry-specific references in the data. In addition, this section explains the symbols used for transcription of the data.

Conversation Analysis

Conversation analysis examines how participants in an interaction conduct themselves in an orderly manner. Its focus is on actual occurrences of talk-in-interaction and its "objective is one of describing the procedures by which conversationalists produce their own behavior and understand and deal with the behavior of others" (Heritage & Atkinson, 1984, p. 1). This study analyzes a

videotaped actual occurrence of interaction among scientists in a chemistry laboratory.

Talk-in-interaction displays how coparticipants make sense of their interaction; each turn is not only a realization of an action but also a display of how the interactant interpreted his or her coparticipant's previous turn. Such an analysis is "defensible" in that it "can always be referred to and grounded in the details of actual occurrences of conduct in interaction" (Schegloff, forthcoming).

CA has proven to be an especially powerful approach in our struggle to learn about the relation of talk-in-interaction to other areas of human behavior. Kendon (1990), a psychiatrist working within context analysis, for example, acknowledges C. Goodwin's (1981) CA-based work on eye-gaze as "the single most significant piece of work on gaze in interaction" among "studies that attempt to examine the patterning of gaze direction in relation to other aspects of behavior in interaction, with a view to giving an account of the role it may play in the interactive process" (p. 89). The approach taken in this paper follows work by C. Goodwin (1981), Schegloff (1984), and Heath (1986), in which non-vocal behavior is interpreted in relation to the specific vocal actions during which it occurs.

Ethnographic and Technical Background of Data

The site of data collection was a science laboratory specializing in inorganic chemistry within a department of chemistry at a university in Germany.² The data segment analyzed in this essay represents the first fifty-five seconds of the beginning of an isolation experiment which stretches over a total length of twelve minutes.

There are three participants present in the opening sequence of this interaction.³ The main interactants are two male doctoral students, referred to as Ulf and Jo. Before videorecording, Jo had set up an elaborate apparatus for the experiment. Jo had asked his colleague and fellow-student, Ulf, to assist him since the experiment was rather complicated. This isolation experiment is part of Jo's dissertation, the goal of which is to produce a new chemical combination. Filming started after both chemists had arrived at the site. At the beginning of the experiment, Jo is involved in two brief interactions with Hartmut, a lab technician. I focus on the first data available from the opening sequence,⁴ since interactants' orientation

to one another is not a given fact in an interaction but has to be achieved in cooperation with other interactants (Jefferson, 1973). This opening sequence displays how, in a step-by-step series of interrelated and embedded actions, coparticipants achieve and coordinate alignment between and among themselves and the experimental apparatus in their laboratory environment.

In the interaction analyzed, the participants refer to certain elements relevant to Jo's experiment. Jo is researching polysulfides, which are combinations of sulfur chains and heavy metals. In the opening sequence, Ulf refers to two elements of Jo's experimental set-up, a conversion frit and protection gas. The conversion frit is a container with three parts, one of which is a screen ("frit") with very fine pores. The other two parts are containers connected with the screen. By converting the frit, a substance from the previously lower part runs through the sieve. Thus, a solid and a fluid can be separated. This instrument is necessary to produce the chemical combination Jo needs for his dissertation. Protection gas, or argon, is an inert gas which is channeled over the fluid in order to prevent the fluid from reacting with air.

The experimental apparatus is located on a counter below a flue. A flue is a shaft that acts as a chimney, taking away fumes which may develop during the experiment. The chemists in this laboratory habitually refer to this whole set-up as "the flue" (or, in the German original, "der Abzug").

Transcription Conventions

In addition to the system developed by Jefferson for conversation analysis (Jefferson, 1984), the following conventions are used:

In each set of lines, such as the following,

	<i>Jo looks towards apparatus</i>
	_____ _____
92 J	na:::in das <u>nich</u> = .hhh tz! .hh pasa:u:w
93	no::: that <u>not</u> = .hhh tch! .hh wa:tch
94	no::: <u>not</u> that= .hhh tch! .hh wa:tch

The first numbered line represents the original speech in German (line 92); the lines above printed in *italics* contain descriptions of

concurrent non-vocal actions.⁵ The second numbered line (line 93) provides a morpheme-by-morpheme gloss of the German. The bottom line supplies an idiomatic English translation (line 94). In some instances, I did not include overlap marks or other specifics about the speaker's delivery of the turn in the English translation in order to avoid a distortion of the original data, such as when the English word order differs from German. For this reason, the glossed line should always be consulted in reading the transcription.

The letter "J" at the beginning of a line is an abbreviation of the speaker's name Jo. Other speaker codes are "U" for Ulf and "H" for Hartmut.

A pitch peak is noted in the transcript if it is relevant to the analysis. It is represented by the symbol '^' as in

48 H Da^ten (drauf)laufen (gradeaus)=

It should be noted that in CA-style transcription punctuation represents intonation contours and not grammatical units. A period means falling intonation, a comma continuing intonation, and a question mark rising intonation.

Key to grammatical glossing:

I	=	informal
P	=	marked for plural
S	=	marked for singular
PRT	=	particle
A	=	marked for accusative case
F	=	marked for feminine gender
M	=	marked for masculine gender
N	=	marked for neuter gender

ANALYSIS

The analysis focuses on the relationship between the coparticipants' orientation to each other vis-à-vis the apparatus set up for conducting the chemical experiment. I will demonstrate that this relationship is systematic while the interaction unfolds sequentially. Specifically, the analysis shows how the interactants display continuous orientation to the scientific apparatus as their common point of spatial reference and as the physical embodiment

of the experiment. We will look at three sequences: (1) after the scientists have arrived at the locus of the experiment and prior to the first procedural step of the actual experiment, one interactant achieves simultaneous orientation to the apparatus, the coexperimenter, and the technician; (2) in the ensuing sequence, while one scientist is involved in two concurrent interactions, he displays avoidance of the apparatus and of his coexperimenter; (3) finally, in negotiating the set-up of the apparatus, one scientist's eye-gaze directed to his co-worker and his co-worker's reaction to it display that eye-gaze direction towards a coparticipant in side-by-side position takes on a different meaning than in mundane face-to-face interaction.

Body Torque: Splitting of Side-by-Side and Face-to-Face Position

The chemistry lab is organized in such a way that the experimental apparatus can only be approached from the front. The back side is adjacent to the wall; the left and right sides are closed in by the frame of the flue. An experimenter working with it would have to face the apparatus and at the same time turn his or her back to the rest of the room. If two persons participate in an experiment, the spatial set-up provides for an arrangement in which the participants face the apparatus, standing side-by-side in relation to each other. Indeed, the two experimenters in the data analyzed assume a side-by-side figuration to each other in relation to the experimental apparatus in front of them. Such a figuration, as illustrated in Figure 1, I will argue, is their basic position in this experiment:



Figure 1: Side-by-Side Position

This "parallel" or "side-by-side" configuration is one of two basic patterns of interactants' bodily orientation which Scheflen (1964) proposes for dyadic groups. In a side-by-side arrangement, coparticipants display mutual orientation to a third party or to an object, whereas in a "vis-à-vis" or face-to-face arrangement, coparticipants relate to each other. In the following, I will analyze an instance of body torque in which the experimental apparatus serves as a central point of spatial reference for an interactant as he coordinates his body posture in an intricate combination of simultaneous side-by-side and vis-à-vis position in order to display participation in two competing interactions.

At the beginning of the data segment, the video shows Jo and Ulf standing in side-by-side position in close proximity to the apparatus while facing it. Ulf is standing on the left side in front of the experimental set-up with his lower and upper body as well as his face in front of the apparatus. His body posture and eye-gaze are aligned with the apparatus similar to the way in which a person in an ordinary conversational situation would be aligned with a

coparticipant. Ulf's hands, although within reach of the apparatus, are hanging alongside his body. Jo's lower body is aligned with the flue on Ulf's right side. Jo's upper body is twisted leftwards, his eye-gaze almost 180° away from the apparatus. This body torque (Figure 2) indicates that he must have turned, and in turning, he must have passed facing Ulf and continued twisting further.



Figure 2: Body Torque Position

In this turned posture, Jo is talking to Hartmut, who is on the other side of the room. Their interaction proceeds as follows (data segment #1):

#1

looks at Hartmut away from apparatus

1 J	ihr	machdoch	auch schon	sicherlich		
2	you (IP)	make (PRT)	also already	certainly		
3	you guys	also soon	certainly			

looks at Hartmut away from apparatus

```

      |_____|
      |       |
4    gleich [(ne  )
5    s  n   [(a   )
6          [((noise))
7    make   [(a   )

```

noise

```

      |_____|
      |       |
8    (.)

```

9 Ulf moves backwards one step

```

      |_____|
10 H °( _____ )°

```

Jo's body posture displays his involvement in two concurrent and competing interactions. He simultaneously embodies both of Scheflen's basic patterns of involvement; his lower body's side-by-side alignment indicates orientation to his co-experimenter, Ulf, and to the apparatus, displaying that Jo is basically "rooted" in the experimental action. By twisting his body at his waist-line, his upper body and eye-gaze assume a face-to-face alignment with Hartmut, indicating that he is temporarily involved in another interaction with Hartmut.

Scheflen (1964) describes the phenomenon of "split" body attention as a mechanism by which in a group "a person may maintain postural congruence with one person in his upper body, and with another in his lower body" (p. 328). The instance of Jo displaying a split body posture, however, is much more intricate. His lower body exhibits orientation to the experimental apparatus and his coexperimenter, Ulf, while his upper body is engaging in a separate, yet concurrent, face-to-face interaction with Hartmut. This single, complex body pose not only reflects the interactant's relationship between orientations towards the apparatus and to his coparticipants but also to the kind of involvement: Jo's side-by-side position with Ulf displays his orientation to Ulf as coexperimenter in relation to their physical directedness to the apparatus; his vis-à-vis configuration exhibits a mere conversational interaction with Hartmut.

In addition, apart from Jo, Ulf also displays participation in the creation of this configuration; in maintaining his side-by-side position, Ulf expresses non-involvement in the Jo/Hartmut interaction. Furthermore, he participates in keeping up the configuration basic for the experiment. Ulf's behavior can be interpreted as a waiting posture for two reasons. His arms and hands, which hang alongside his body, have assumed a position of non-speakership. Elsewhere (e.g., Schegloff, 1984) it has been established that hand movements are mostly a speaker's actions. By keeping his hands in non-active position, he displays that he is not a possible next speaker in the ongoing interaction.⁶ Jo, by maintaining his lower body in side-by-side position, displays that he is putting Ulf and the proceedings of the experiment temporarily on hold while continuously maintaining orientation to the experiment.

As noted, Jo's body torque indicates his involvement in two competing interactions. During the closing turn of his interaction with Hartmut (#2, lines 11-13), Jo twists his body back toward the apparatus, halting at a point at which he faces the apparatus:

#2

11 (.)

*Jo closes eyes, turns head towards
apparatus with eyes closed,
opens eyes when towards apparatus
while Ulf steps towards apparatus*

 |——|
 | |

12 J na:ja:.

13 o:h we:ll.

Through this movement, Jo displays that he is phasing out of his interaction with Hartmut. Now that both Jo and Ulf are facing the apparatus, and, in terms of their interaction, are aligned side-by-side, the initiation of the experiment becomes relevant.

Thus, the relationship between vocal and non-vocal actions in these specific data is meaningful only if interpreted in reference to the presence of the apparatus. The scientific apparatus set up for the experiment is used by Jo and Ulf as the common point of spatial reference for their alignment. Whereas in the analysis of this instance of body torque we examined the participants' orientation to each other and to the apparatus, in the next instance of body torque,

during the initiation phase of the experiment, we will investigate the interactional achievement of this position and the role of the apparatus.

Body Torque as a Display of Avoidance of Coexperimenter and Apparatus

The following analysis of a complete sequence of phasing in and out of body torque will lead to the conclusion that this split position can be interpreted as an avoidance strategy within the sequence in which it is embedded. I will argue that within this avoidance strategy the interactant combines avoidance of his coparticipant and of the apparatus.

The segment of interaction to be analyzed occurs after Jo has phased out of the first body torque just discussed. Lines 12-13 (repeated in #3) indicate closure on the vocal and non-vocal plane:

#3

*Jo closes eyes, turns head towards
apparatus with eyes closed,
opens eyes when towards apparatus
while Ulf steps towards apparatus*

12 J *na:ja:.*
13 *o:h we:ll.*

*Jo and Ulf look at common focal point
of apparatus*

14 *(1.2)*

15 U .hhhhh (0.8) wieso hasse jetzt eigentlich
16 .hhhhh (0.8) why have you (IS) now anyway
17 .hhhhh (0.8) why did you take

*Ulf steps back;
noise of glass clinging*

18	ne	<u>Umkehr</u> fritte.	genomm?	
19	a (AF)	conversion	frit. taken?	
20	a	conversion	frit. anyway?	

Both participants have aligned their posture and eye-gaze towards the apparatus. This common coordinated alignment and Ulf's presence being warranted only by Jo's prior request for his assistance make the initiation of the experiment the next relevant action. After 1.2 seconds (line 14), while both coparticipants look at the apparatus, Ulf poses a question: "wieso hasse jetzt eintlich ne Umkehrfritte. genomm?" ('why did you take a conversion. frit anyway?' [lines 15-20]). In this sequential environment, Ulf's question constitutes a complaint in that he is asking Jo to justify why he chose to install this specific instrument in the apparatus. His question challenges Jo's expertise because it implies that he erred in setting up the apparatus. The falling-rising intonation in "Umkehrfritte. genomm?" (represented by a period and a question mark) adds to this question's function as a challenge (M.H. Goodwin, 1983). Strictly speaking, it is not the prior speaker's utterance which is challenged here but rather an element in the apparatus for whose set-up Jo is responsible. The interactants' relation to the apparatus has opened a new dimension in that, with this question, Ulf makes an instrument in the apparatus the topic of the talk.

By challenging the experimental set-up, Ulf's question also delays the onset of the actual experiment. For 1.5 seconds (#4, line 21), Jo delays the answer:

#4

*Jo and Ulf
look at apparatus*

21	(1.5)			

The video data show that Jo's eye-gaze during this delay is directed to the apparatus. Shortly before Jo takes the turn, Hartmut can be heard talking from the other side of the room. His turn is delivered

more softly than Jo's overlapping talk, making most of its content indiscernible to the transcriber. Since Hartmut is not within the video camera's angle, we do not know to whom he is talking. Yet, we will see later (in the discussion of data segment #8) that Jo orients to Hartmut. Jo's talk overlaps with Hartmut's during most of Hartmut's utterance, as we see in segment #5:

#5

22	H	°([anfangn)°]
23		°(begin)°]
24	J			wie wollst <u>du</u>	das'n ma.]chn:?
25				how wanted <u>you</u> (IS)	that (PRT) d]o:?
26				how did <u>you</u> wanna	do it then?

In reference to Ulf's challenge, Jo's response avoids giving a justification. By answering a question with another question, Jo shifts the task of providing the answer back to the original questioner. Furthermore, Jo's question is delivered with the same rising-falling intonation as Ulf's prior challenge. In this way, Jo not only returns the question but also the challenge. Jo's emphasis on "du" ('you'-informal singular, line 24) in addressing Ulf establishes a contrast between himself and his coparticipant as well as a contrast between their ways of setting up the experimental apparatus. A little later on in the interaction, when Jo and Ulf are moving towards agreement, Jo stresses their communality by changing person reference to 'we' ("wer" line 71, "wir" line 76).

After Jo's question in overlap with Hartmut's turn (lines 22-26, #5), Jo defers his negotiation with Ulf by turning around to Hartmut, initiating the repair seen in segment #6:

#6

27		(0.2)
		turns around
		to Hartmut
		— —
		—
28	J	BITTE?
29		PARDON?

This turn-at-talk, in combination with the speaker's body movement, is designed to display disaffiliation with Ulf and the apparatus. Jo's question "BITTE?" ('PARDON?' [line 28-29]), delivered much more loudly than the previous talk, is specifically designed to be addressed to Hartmut. Amplitude shift is a mechanism by which a speaker can mark his or her talk as disaffiliated with prior talk (Goldberg, 1978). By increasing his volume, Jo thus disaffiliates his current action with his prior action.

This disaffiliation is also displayed in his body movements. In the middle of the one-word other-initiated repair ("BITTE?") Jo turns around to Hartmut, thus indicating to both Ulf and Hartmut that he is phasing into an interaction with Hartmut. Given the circumstance that Jo's interaction with Ulf is in its beginning sequence and Jo's previous interaction with Hartmut was closed, Jo might prefer dealing with Hartmut first in order to clear the way for the new interaction with Ulf.


For Jo, his choice to put his interaction with Ulf on hold, by engaging in an interaction with Hartmut, may be an avoidance strategy. This interpretation is strengthened by an observation concerning his eye-gaze. While turning around to Hartmut, Jo's twisting takes his upper body and head on a trajectory away from the apparatus, first facing Ulf, then facing Hartmut. At the point at which he almost faces Ulf, he slightly lowers his eye-gaze, moving it up again after it has passed Ulf's eye-gaze periphery. Taking the immediate sequential environment into account, Jo's eye-gaze movement displays avoidance of meeting Ulf's eye-gaze. In terms of Scheflen's (1964) patterns of configurations, Jo's upper body moves out of a side-by-side position by turning away from the apparatus. In doing so, he moves through a vis-à-vis pose with Ulf during which he avoids interaction with Ulf by avoiding meeting his gaze.

Given the sequential relevance of initiating the experiment, Jo's continuing involvement with Hartmut can be seen as a further delay. His unmitigated willingness to attend to Hartmut's demands, such as first to respond to the previous turn and then to expand a minimal answer (#7, lines 36-41) displays that he leaves the other demand unattended:

#7

30	H	°willst du	denn	jetz	heut	schon
31		°want	you (IS)	(PRT)	now	today already
32		°so	you	want	to	start already

*Jo produces two
horizontal head shakes*

- 
- 33 anfa[ngn?°
 34 sta[rt?°
 35 today?°
 |
 36 J [nnee.
 37 [nnoo.

 38 (0.2)

 39 J °heut no ni:ch.°
 40 °today still not.°
 41 °not yet today.°

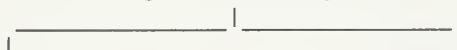
In segment #8, Hartmut proceeds by giving an explanation for his question (lines 42-50), which Jo receives with a 'no-problem' response (lines 51-53):

#8

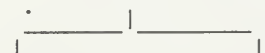
- 42 H dann (.) (ichlaßich) nämlich dann den
 43 then (.) (I leave I) (PRT) then the(AM)
 44 then (.) (I gonna leave I) the one

 45 ein'n Töminel nämlich blockiert daß man
 46 one(MA) terminal (PRT) blocked that one
 47 terminal blocked then so that one

Ulf steps toward apparatus

- 
- 48 H Da^ten (drauf)laufen (gradeaus)=
 49 da^ta (on it) run (straight)=
 50 runs da^ta (on it) (straight)=

two vertical head shakes

- 
- 51 J =a:llles klar.
 52 =e:verything clear.
 53 =all right.

Ulf's non-vocal behavior displays that he is tracking the interaction as an overhearer. Ulf had stepped backwards, away from the flue (#3, lines 18-20) during the turn just before Hartmut's second involvement. Ulf remains in this position until a pitch peak (indicated by '^') on "Da^ten" (#8, line 48) is audible in Hartmut's utterance. This pitch peak occurs at a point in the turn at which the utterance projectably nears completion, i.e., the sentence has been developed far enough for the coparticipant to project the remainder. Right after Hartmut's pitch peak, Ulf initiates a noticeable shift from a standing posture to a movement, as shown again in segment #9:

#9

Ulf steps toward apparatus

48	H	Da^ten	(drauf)laufen	(gradeaus)=
49		da^ta	(on it) run	(straight)=
50		runs da^ta	(on it) (straight)=	

Ulf moves forward toward the flue, thus displaying that his interaction with Jo is becoming relevant. His spatial reference point is the flue, the physical representation of the experiment. This analysis shows that there is an interplay between the sequential evolution of the Jo-Hartmut interaction and the non-vocal action of the overhearer Ulf. In phasing back to his interaction with Ulf, Jo's torso goes through the same motions as in his previous phasing into the interaction with Ulf (#3, lines 12-13). Again, his vis-à-vis alignment with the flue and side-by-side position with Ulf as the basic points of spatial reference are evidenced in his phasing in and out of the interaction with Hartmut, seen here in segment #10:

#10

two vertical head shakes

51	J	=a:lles	klar.
52		=e:verything	clear.
53		=all right.	

himself (#12, lines 55-60), topicalizing a chemical substance in the experimental apparatus:

#12

two vertical head shakes

51 J =a:ll'es klar.
 52 =e:verything clear.
 53 =all right.

Jo produces two vertical head shakes, turns back to apparatus with eyes closed; he opens eyes when at previous focal point in apparatus; Ulf and Jo look at common focal point in apparatus

54 (3.0)

banging noise

55 U ja: ds is doch jetz, M'ment was war
 56 ye:s that is (PRT) now, m'ment what was
 57 ye:s that must be now, one moment what was

 58 das jetz, dee emm eff ne?
 59 that now, dee emm eff right?
 60 that now, dee emm eff right?

The structure of Ulf's turn (#12, lines 55-60) contains several features that C. Goodwin (1987) found speakers produce in word searches built to achieve a shift in activity. According to C. Goodwin's research, the speaker makes the word search itself an activity by displaying forgetfulness or uncertainty. Ulf searches for the name of a chemical substance in the apparatus; he supplies a candidate identification himself and closes with a tag question and rising intonation. His question presupposes that Jo possesses the ability to answer it. Ulf places strong constraints on Jo to participate in identifying the substance in the apparatus and is thereby deferring the initiation of the experiment.

In addition to his vocal action, Ulf turns his head so that he is facing Jo. In terms of Scheflen's (1964) patterns of

configurations, Ulf is assuming a split position; with his lower body in side-to-side position, Ulf shows that he orients to the apparatus and is rooted in the activity of conducting the experiment. His simultaneous face-to-face position with Jo displays his orientation to the activity of negotiating the experiment with Jo.

Whereas in face-to-face interaction eye-gaze directed to the speaker indicates hearership and involvement in the business at hand (Goodwin & Goodwin, 1986), in this institutional setting eye-gaze directed to a speaker has to be understood as a more complex activity. In side-by-side position, while the scientists talk, their unmarked eye-gaze direction is towards the apparatus; and hearership does not have to be displayed by eye-gaze direction to the speaker. Thus, when in side-by-side position a scientist directs his eye-gaze away from the apparatus towards his co-worker, he shifts orientation away from the experimental procedure to the ongoing interaction between the co-workers.

Heath's (1986) in-depth investigation of eye-gaze indicates that looking at a coparticipant "plays a significant part in the process of establishing a common focus of activity and involvement, not simply as a means of monitoring each other's concerns and behavior, but actually in initiating action and activity" (p. 25). By looking at Jo, Ulf places a constraint on Jo to share his focus. Furthermore, by directing his eye-gaze away from the apparatus towards Jo, Ulf displays in a marked way to Jo that he is listening to him and expecting an answer from him. For 3.0 seconds (#13, line 61), Jo does not respond vocally to Ulf's question, yet his body movement is meaningful and informative as a reaction to Ulf's prior eye-gaze:

#13

Ulf looks at Jo

61 |_ |
 |_ |
 (3.0)

*Jo turns head away from apparatus below
Ulf's eye level and back to apparatus*

 |_ |
 |_ |
62 J Methanol dee emm eff eins, (.)
63 methanol dee emm eff one, (.)

Jo reacts in a dispreferred manner to Ulf's prior non-vocal and vocal actions. Non-vocally, he declines Ulf's pressure to attend to the apparatus or to Ulf, by turning away from the apparatus below Ulf's eye level; vocally he produces an embedded correction (Jefferson, 1983) in responding to Ulf's question. While answering, Jo turns his head down and leftwards, on the same trajectory he used when phasing into his interaction with Hartmut. As Ulf is positioned on Jo's left, a left head turn by Jo would result in his eye-gaze meeting Ulf's eye-gaze. While turning, Jo lowers his trajectory so as to avoid meeting Ulf's gaze. In turning away from the apparatus and in "quoting" his earlier eye-movement when phasing into talk with Hartmut, Jo's body initiates avoidance of participating in the activity Ulf proposed. Towards the end of his turn, Jo's head moves back to a position facing the apparatus, thus indicating that his focus of attention is the experiment.

After Ulf has gained confirmation about the identity of the chemical substance (#13, lines 62-63), he launches a second challenge by offering a counter-suggestion for how to conduct the experiment (#14, lines 64-69):

#14

*Ulf and Jo look at the apparatus
as their common focal point*

	_____ _____	
64	U	das könnte man doch auch ganz <u>norma:l</u>
65		that could one (PTR) also quite <u>no:rmally</u>
66		one could also suck it out quite <u>no:rmally</u>

<i>Ulf looks at Jo</i>	<i>Ulf points with his right hand to the apparatus</i>
----------------------------	--

	_____ _____ _____ _____	
67		so::, (.) unter, (.) Schutzgas <u>absaugen</u> .
68		su::ch, (.) under, (.) <u>protection</u> gas suck <u>out</u> .
69		like, (.) under, (.) <u>protection</u> gas.

This second challenge takes a stronger stand against Jo's set-up of the apparatus in that Ulf proposes a concrete suggestion for improvement. By saying "ganz normal" ('quite normally') Ulf implies that Jo's set up of the experiment is abnormal. By making a suggestion, he offers a better procedure at the same time as he

72 ((irritated tone of voice))
 73 tch! yea:h now have we it (NA) for once he:re.
 74 tch! yea:h now we have it he:re for once.

Jo's irritated tone of voice (#15, lines 71-74), combined with three slight horizontal head shakes, makes explicit that he objects to Ulf's suggestion. Vocally, Jo does not state any technical reason but rather gives a weak argument that since the apparatus is already set up, he does not want to change it at this point.

On Ulf's part, there is no uptake of Jo's justification. After a 1.0 interturn gap (#16, line 75), Jo takes the floor again and offers a stronger reason why he does not want to make changes in the experimental set-up (#16, lines 76-81):

#16

75 (1.0)

works on glass flask in his hands

76 J 's: 'o' kein Problem=machn wir diese
 77 it (PRT) no problem=make we this one
 78 but it's no problem=we close this one

Jo looks at apparatus

79 J hier zu, (5.0)
 80 here close, (5.0)
 81 here, (5.0)

Jo's turn has two units. The first unit " 's: 'o' kein Problem" ('but it's not problem') acknowledges that Ulf has a problem with the experimental set-up, yet it rejects the seriousness of the problem. Jo's retaliation is expressed by the particle "o," an abbreviated version of "doch" (represented in the translation by 'but'). The second unit, "machen wir diese hier zu" ('we close this one here'), is designed to remedy Ulf's problem by suggesting a slight change in the experimental set-up. Jo's vocal flow ceases with continuous intonation and is followed by a long intra-turn gap of 5 seconds (#16, lines 79-81). During this stretch of silence Jo shifts his eye-gaze direction away from the glass flask in his hands towards the

apparatus. His eye-gaze direction complements his ensuing vocal action (#17, lines 82-87), giving in to negotiating the apparatus. Although he does not go along with Ulf's suggestion, Jo takes the first step towards a compromise by admitting a weakness in the set-up:

#17

82 J tz! (0.5) die Scheise is natürlich
 83 tch! (0.5) the shit is of course
 84 tch! (0.5) the shitty thing of course

 85 immer, (1.0)
 86 always, (1.0)
 87 is always, (1.0)

Jo does not complete his sentence but instead halts in the middle of the turn; the non-completion of his turn is signalled by continuing intonation. Ulf completes Jo's turn (#18, lines 88-90) by suggesting that it will be a problem to remove something from the apparatus afterwards:

#18

88 U dasda hinterher widdarauszuholn.
 89 thatA there afterwards again fetch out.
 90 to get this out again afterwards.

Ulf's turn is the first display of agreement with Jo in this interaction. This agreement, however, is an alignment with Jo's admitting of a weakness which aligned Jo with Ulf. By aligning with Jo's self-criticism, however, Ulf once more displays that he disparages Jo's experimental set-up. After a 2-second gap (#19, line 91), Jo vehemently rejects Ulf's completion and pushes for the initiation of the actual experiment (#19, lines 92-97):

#19

91 (2.0)

Jo looks towards apparatus

```

      _____|_____
      |               |

```

92 J na:::in das nich= .hhh tz! .hh pasa:u:w93 no::: that not= .hhh tch! .hh wa:tch94 no::: not that= .hhh tch! .hh wa:tch

*leans towards apparatus,
works on equipment*

```

      _____|_____
      |               |

```

95 J laßuns das ma machn=

96 let us that (PRT) do=

97 let's do it=

After rejecting Ulf's completion ("na:::in das nich" ['no::: not that']) Jo calls for Ulf's attention (".hhh tz! .hh pasa:u:w" ['.hhh tch! .hh wa:tch']). He then proposes beginning the experiment by saying "laßuns das ma machn=" ('let's do it='). By using "uns" ('us') he includes Ulf's cooperation. In the next turn (segment #20), Ulf gives in by agreeing to Jo's appeal:

#20

```

98 U   =machnwes so:                °o°°kee.°°
99     =do we it like tha:t         °o°°kay.°°
100    =let's do it like tha:t      °o°°kay.°°

```

Ulf's agreement to go along with Jo's proposal clears the way for the initiation of the experiment proper.

The analysis demonstrates that while negotiating the experimental apparatus, the scientist who challenges his co-worker's experimental set-up achieves a shift in the meaning of gazing at the apparatus. Whereas before it meant orientation to the experiment, in its new sequential environment it means negotiating the apparatus. In comparing eye-gaze organization in mundane face-to-face interaction to interaction in side-by-side position, eye-gaze directed to a speaker has a different meaning. In mundane face-to-face interaction, it displays hearership, whereas in side-by-side interaction, in which hearership is not displayed through gazing at speaker, it marks a shift in the orientation of the ongoing activity.

CONCLUSIONS

This micro-analysis replicates prior work which has found a systematic interplay between vocal and non-vocal actions. Although the analysis of this rather brief stretch of data does not warrant a broader generalization, it has nonetheless expanded our understanding of vocal and non-vocal actions in that it shows a systematic relationship between the way scientists orient to each other and to an experimental apparatus. The presence of the apparatus becomes observably relevant in the interactants' physical alignment to one another and to the apparatus as a central point of spatial reference. In addition, the scientists orient to the experimental apparatus as the physical embodiment of the experiment.

In the social sciences in general, and in applied linguistics in particular, we have striven to select and refine our research methodology; this study demonstrates that conversation analysis is a powerful approach which helps us in our struggle for a clear and defensible understanding of the activities in which human interactants are involved.

NOTES

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² The data were collected and kindly made available by Klaus Munsberg (Department of Linguistics and Literary Criticism, University of Bielefeld, Germany) who also provided a basic audio transcription reconciled by a scientist from the chemistry lab in which the data were collected. I retranscribed a selected data segment according to Jefferson (1984) and included a description of non-vocal actions, a morpheme-by-morpheme gloss, and a translation from German into English.

³ Please refer to Appendix A for a complete transcript of the interaction.

⁴ Strictly speaking, the data do not represent the entire opening sequence since videotaping started after the arrival of the scientists.

⁵ The verbal description and pictorial representation of body movements remain insufficient and unsatisfactory, yet as long as no better technical means to represent them are accessible, we have to resort to this frustrating compromise.

⁶ See Schegloff (1984) for a deeper analysis of these gestures.

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Maria M. Egbert is a Ph.D. student in applied linguistics at UCLA. She has an M.A. in Foreign Language Education from the University of Georgia, Athens

Jo looks at Hartmut away from apparatus

1	H				
2		you (IP)	make (PRT)	also already	certainly
3		you guys	also soon	certainly	

```

4      gleich [(ne      )
5      s      [(a       )
6              [((noise))
7      make   [(a       )

```

8 (.)

10 H \circ () \circ

11 (.)

Jo closes eyes, turns head towards
apparatus with eyes closed,
opens eyes when towards apparatus
while Ulf steps towards apparatus

12 J na:ja:.
13 o:h we:ll.

Jo and Ulf look at common focal point
of apparatus

- 14 (1.2)
 15 U .hhhhh (0.8) wieso hasse jetzt eigentlich
 16 .hhhhh (0.8) why have you (IS) now anyway
 17 .hhhhh (0.8) why did you take

Ulf steps back;
noise of glass clinging

- 18 ne Umkehrfritte. gen~~omm~~?
 19 a(AF) conversion frit. taken?
 20 a conversion frit. anyway?

Jo and Ulf
look at apparatus

- 21 (1.5)
 22 H °([anfangn)°]
 23 °(| begin)°]
 24 J |wie wollstdu das'n ma.]chn:?
 25 |how wanted you(IS) that(PRT) d]o:?
 26 [how did you wanna do it then?
 27 (0.2)

turns around
to Hartmut

- 28 J BITTE?
 29 PARDON?
 30 H °willst du denn jetzt heute schon
 31 °want you(IS) (PRT) now today already
 32 °so you want to start already

Jo produces two
horizontal head shakes

33 |
 |_ _|
33 anfa[ngn]?°
34 sta[rt]?°
35 today?°
 |
36 J [nnee.
37 [nnoo.

38 (0.2)

39 J °heut no ni:ch.°
40 °today still not.°
41 °not yet today.°

42 H dann (.) (ichlaßich) nämlich dann den
43 then (.) (I leave I) (PRT) then the (AM)
44 then (.) (I gonna leave I) the one

45 ein'n Töminel nämlich blockiert daß man
46 one(MA) terminal (PRT) blocked that one
47 terminal blocked then so that one

Ulf steps toward apparatus

48 H Da^ten (drauf)laufen (gradeaus)=
49 da^ta (on it) run (straight)=
50 runs da^ta (on it) (straight)=
two vertical head shakes

51 J =a:ll'es klar.
52 =e:verything clear.
53 =all right.

Jo produces two vertical head shakes, turns back to apparatus with eyes closed; he opens eyes when at previous focal point in apparatus; Ulf and Jo look at common focal point in apparatus

54

(3,0)

banging noise

- 55 U ja: ds is doch jetz, M'ment was war
 56 ye:s that is (PRT) now, m'ment what was
 57 ye:s that must be now, one moment what was

- 58 das jetz, dee emm eff ne?
 59 that now, dee emm eff right?
 60 that now, dee emm eff right?

Ulf looks at Jo

- 61 (3.0)

*Jo turns head away from apparatus below
 Ulf's eye level and back to apparatus*

- 62 J Methanol dee emm eff eins, (.)
 63 methanol dee emm eff one, (.)

*Ulf and Jo look at the apparatus
 as their common focal point*

- 64 U das könnte man doch auch ganz norma:l
 65 that could one (PTR) also quite no:rmally
 66 one could also suck it out quite no:rmally
Ulf looks Ulf points with his right
at Jo hand to the apparatus
 67 so::, (.) unter, (.) Schutzgas absaugen.
 68 su::ch, (.) under, (.) protection gas suck out.
 69 like, (.) under, (.) protection gas.

*Jo turns head away from apparatus
 to his hands in which he holds a
 glass flask*

- 70 (2.0)

Jo turns eye gaze and head towards
glass flask in his left hand

Jo produces three slight horizontal
head shakes

- 71 J tz! ja: jetz hamwers eima hie:er.
72 ((irritated tone of voice))
73 tch! yea:h now have we it(NA) for once he:re.
74 tch! yea:h now we have it he:re for once.
- 75 (1.0)

works on glass flask in his hands

- 76 J 's: 'o' kein Problem=machn wir diese
77 it (PRT) no problem=make we this one
78 but it's no problem=we close this one

Jo looks at apparatus

- 79 J hier zu, (5.0)
80 here close, (5.0)
81 here, (5.0)
- 82 J tz! (0.5) die Scheise is natürlich
83 tch! (0.5) the shit is of course
84 tch! (0.5) the shitty thing of course
- 85 immer, (1.0)
86 always, (1.0)
87 is always, (1.0)
- 88 U dasda hinterher widdarauszuholn.
89 thatA there afterwards again fetch out.
90 to get this out again afterwards.
- 91 (2.0)

Jo looks towards apparatus

		_____		_____	
92 J	na:::	in das	<u>nich</u> =	.hhh	tz! .hh pasa:u:w
93	no:::	that	<u>not</u> =	.hhh	tch! .hh wa:tch
94	no:::	<u>not</u>	that=	.hhh	tch! .hh wa:tch

*leans towards apparatus,
works on equipment*

		_____		_____	
95 J	laßuns	das	ma	machn=	
96	let us	that	(PRT)	do=	
97	let's	do it=			
98 U	=machnw	ers	so:		°o°°kee.°°
99	=do	we it	like tha:t		°o°°kay.°°
100	=let's	do it	like tha:t		°o°°kay.°°

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EXCHANGE

A Reply to Kanpol

Alastair Pennycook

Ontario Institute for Studies in Education

Barry Kanpol has written an interesting response to the article I wrote for the inaugural issue of this journal (Pennycook, 1990). In many ways, his essay does not require a reply since it is largely additive rather than oppositional in spirit. Nevertheless, since his response not only stimulated my thinking but also gave me certain cause for concern, I would like to take this opportunity to make a few comments. Kanpol (1990) argues that while he agrees with my call for a more political and critical applied linguistics, my approach falls short of providing a basis for critical practice since I both failed to consider some of the favorable aspects of modernism and the negative aspects of postmodernism and failed to generate a practical agenda for teaching. In response to these shortcomings, Kanpol proposes a "theory of 'similarity within difference,'" and provides examples from actual classes that exemplify this theory.

In responding to this, I would like first of all briefly to reiterate my own position. I am interested in postmodern thought not merely because it is part of the current intellectual climate (though you would not suspect this if you read only applied linguistic literature), but rather because it provides a position from which the "metanarratives" of applied linguistics can be brought into question. As Lyotard (1984) has argued in general, and as Cherryholmes (1988) has argued with respect to education, modernist and structuralist thought tends to be based on metanarratives that lay claim to rationality, linearity, progress, and control. While these grand narratives of modernist thought have doubtless brought major developments to our material and intellectual well-being, they also seem indelibly linked to some of the most appalling horrors of the modern world, from Auschwitz to Hiroshima, from sexist and racist bigotries to nationalist idolatries, from stark poverty to excessive wealth, from massive pollution to

pointless consumption. I am at present trying to explore the relationships between the global spread of English, the growth of linguistics and applied linguistics as *disciplines* (retaining the ambiguity of the term), and global discourses of colonialism, imperialism, development, modernization, education, fundamentalism, and so on, discourses which, I believe, play an important role in the (re)production of global inequalities.

An attempt to deconstruct the metanarratives of applied linguistics, then, is not some obscurantist theoretical process or randomly destructive project aimed merely at the dissolution of the applied linguistic canon. Rather, as with other politically oriented deconstructive projects, it is an attempt to question received opinions and knowledges, to investigate power/knowledge relationships for and about language teaching. This project must also, of course, go beyond the deconstructive element to produce a reconstructive program. However, just as the deconstructive program is not randomly destructive, so this reconstructive process is not a *laissez-faire*, open-door policy to all other ideas. The insurgent knowledges that might emerge from their subjugation beneath the dominant metadiscourses (see Foucault, 1980) would in turn be submitted to critical scrutiny. It was to this end that I introduced a notion of *principled postmodernism*, a heuristic which I hoped might suggest a way of moving forward from a deconstructive project to a reconstructive one responsive to political and ethical questions. Thus, while I think Kanpol quite rightly points to the limitations of my tentatively posited principled postmodernism, it is perhaps not quite fair to assume that my interest in postmodernism leaves me only with questions of difference. My tentativeness was a product first of my article being intended only as a speculative attempt to sketch out some issues that I felt ought to be of concern to applied linguists, and second, of my reluctance to try to reintroduce some firm alternative, a different theory, a new narrative to replace the old.

Kanpol's central point, apart from the issue of generating a practical agenda (to which I shall return later), addresses this key point of postmodernism and poststructural debate as to how reconstructive projects are to be taken up. The deconstruction of grand narratives and universals, the attacks on metadiscourses, essentialist and foundationalist principles, and the profound questioning of claims to rationality, knowledge and truth, seem to leave us only with what at times appears to be but a fascination with fragmentation, a celebration of difference. What he is suggesting is

that an important way out of the dilemma posed by a seemingly paralyzing relativism is to theorize more carefully about similarity within difference. While at first glance this appears to make very good sense, I would like to undertake a slightly more critical reading of Kanpol's views by looking more carefully at his reading of modernism and postmodernism, by placing his views in a broader context and relating them to others' approaches to postmodern problems, by considering the examples he produces to exemplify his work, and finally by making a small defense in favor of at least the temporary retention of a notion of principled postmodernism as part of a critical applied linguistics.

Following Giroux, Kanpol argues for the retention of some of the "favorable aspects of modernism," namely, "the hope of enlightenment, a commitment to community . . . through individual reason and reflection, a unity of the individual and society in an ongoing dialectical vision of individual betterment, social progress, human emancipation, and human possibility" (p. 240). He quotes Giroux (1990) as suggesting that modernism provides a discourse based on "the principles of liberty, justice, and equality" (p. 240). Elsewhere, Giroux also talks of "retaining modernism's commitment to critical reason, agency, and the power of human beings to overcome human suffering" (Giroux, 1991, p. 37). But I find that these are rather strange readings of modernism and postmodernism. If, as a number of people have remarked (e.g., Hebdige, 1986), postmodernism is anti-utopian, this does not mean that it has rejected notions of justice, equality, agency, or progress. Rather, it has pluralized these notions, it has made them more slippery, it has made them contingent on historical and cultural conditions, it has allowed for no stable referent for these concepts and speaks with an inevitable tone of skepticism. We can still hope and struggle for a better world, but we can never be sure of a stable point from which to dream our utopian dreams; we can only talk of democracies, freedoms, rationalities, justices, equalities. As Lyotard (1984) argues, the defining quality of modernity is its acceptance of metanarratives, while the defining quality of postmodernity is its skepticism towards metanarratives. To argue for the retention of the "positive aspects of modernism" (Kanpol, p. 240) is not only to retain possibilities of agency, justice, and so on, but also to argue for the retention of these as metanarratives, for a universalizing and totalizing version of freedom or equality, and surely, therefore, for a metanarrative of similarity. Kanpol does

suggest, after all, that "we should search for modernistic similarities within postmodern differences" (p. 247).

Kanpol suggests that "to separate modernism and postmodernism as oppositional, mutually exclusive theoretical formulations simply reinforces division and antagonism among academics" (p. 247). I think he is certainly right that we need to avoid endless games of positioning and counter-positioning, but I am not so sure that modernism and postmodernism can be so easily reconciled as he suggests. Poststructuralist thought, as I see it, is fundamentally opposed to the dichotomizing practices of structuralism. I think that by suggesting that modernism and postmodernism can be bridged by a theory of similarity within difference, Kanpol may be reproducing the dichotomies and dialectics of structuralism and modernism which poststructuralism and postmodernism had sought to deconstruct. Thus, it seems to me that both Giroux and Kanpol wish to remain within the more comfortable confines of a modernist epistemology, using deconstructionist techniques where useful but retreating into a position that allows for stable and unitary definitions when the self-reflexive challenges of postmodernism start to raise difficult questions about their own projects. Thus, Giroux, faced by what some of us view as the demise of democracy in the U.S., retains his faith in the domains of politics and democracy as sites of struggle and argues for a critical pedagogy to sustain a radical democracy; and Kanpol, faced by the possibilities of growing diversity and possibly incommensurability, turns to a theory of similarity within difference.

Kanpol's argument is that postmodernism dwells too much on difference, thereby not allowing for consensus or community around a notion of similarity. In some ways this is the reverse side of liberal pluralism. While conservative views have tended to emphasize unitary forms of language, culture, and knowledge, in the form of standard languages and grammars, 'high' culture, and fixed curricula, more liberal views have looked for diversity within these fixed unities. Examples of this within applied linguistics would be the studies of variability in sociolinguistics and interlanguage. Thus, the debate around standards in English as an international language is framed between Quirk's (e.g., 1985) conservatism and Kachru's (e.g., 1985) liberal pluralism. A postmodern stance, by contrast, starts with a questioning of the ontological status of 'language' or 'interlanguage,' or 'English as an international language,' and seeks to investigate the discursive

construction of such concepts. In such a deconstruction, we arrive at a notion of people engaged in acts of communication and identity (for a similar theme see Le Page & Tabouret-Keller, 1985) without assuming the *a priori* existence of a language. Kanpol appears to be suggesting that having arrived at this dangerous point of difference, we need a theory of similarity to regroup. But if this similarity is not itself open to deconstruction, if these are "modernistic similarities," then Kanpol's position seems to come dangerously close to a modernist liberal pluralism.

A second point of concern about Kanpol's theory is the confidence with which he asserts our need for it. While I think there are good grounds for a degree of confidence in the importance of deconstructive work, I think we should be more cautious about the ways in which we approach reconstructive work. One of the hopes I have for a postmodern epistemology is that it may bring more academic humility. There is no longer a space from which to claim to have the answer, to have developed a theory that can explain comprehensively, for all knowledges remain partial and interested. This, I think, can help oppose the fossilization of thinking into methods and models as well as oppose the often pretentious claims to have a 'theory' of, for example, second language acquisition. Once again, we can see the modernist conservative/liberal divide in second language acquisition theory between those, such as Krashen (e.g., 1982), who easily conflate 'a theory' with 'theory' in general, and the more pluralist views held, for example, by Ellis (1985), who is not only interested in variability in interlanguage but also lists his own theory as one among several. My concern, however, is not with mediating between conservative and liberal pluralist modernism but more with the whole issue of making claims to have a theory: what are the effects of such claims to truth and knowledge?

Furthermore, Kanpol's theory needs to be understood relative to a number of other reconstructive projects which start from a more overtly political stance. Giroux (1991), for example, also asks "how to develop a theory of difference that is not at odds with a politics of solidarity" (p. 32). His emphasis is on developing a critical or border pedagogy that can educate a critical citizenry capable of participating in a radical democracy. In a different vein, Simon (forthcoming) has been exploring the difficult terrain of ethics, asking how we can reconstruct an ethical project when the metadiscourses of morality have been deconstructed. Rather than concentrating on the formally political domain (as does Giroux), Simon has been working with a more Foucauldian notion of power

as both indissolubly linked to knowledge and permeating all social relationships. From this more poststructuralist point of view, questions of culture and knowledge production come to the fore, and questions of community and solidarity can be framed, for example by seeing educators as "cultural workers" who can form bonds with other people involved in cultural production. Welch's (1985) "feminist theology of liberation" seeks to create "communities of resistance and solidarity" through reconstituted feminist and Christian practices. What this and other feminist work in particular is working with is the relationship between "the primacy of the particular" and the need for "redeemed communities" (pp. 74-75). Fraser & Nicholson (1990) argue that it is through an emphasis on cultural and historical specificity that a "pragmatic and fallibilistic" postmodern-feminist theory can be created (p. 35). Their argument that contemporary feminist political practice is a "matter of alliances rather than one of unity around a universally shared interest or identity" (p. 35) might in some ways be construed as the same as Kanpol's "similarity within difference." The important difference, however, is that these "alliances," these "communities of resistance and solidarity," emerge through political struggle, not through a theory that draws them together.

Kanpol also criticized me for not attempting "to generate a practical agenda to connect with [my] grand theory" (p. 240). Apart from the fact that I am by no means trying to construct a "grand theory," I think we should also be very wary of attempting to "generate a practical agenda" from our theoretical work. While I welcome Kanpol's introduction of classroom practice into what has possibly been to many an overly theoretical discussion, we should be cautious about deriving such practice from the theoretical. Many of us are trying to develop critical practices in our language teaching, and I feel examples should emerge from our own self-reflexive explorations of our teaching, rather than be generated by theory. As for the examples that Kanpol provides, I find that these too leave me somewhat uneasy. While the use of text to recall history and the shared experiences of students, the use of film to question stereotypes and students' similar confrontations with these stereotypes, and the use of cooperative learning as a challenge to individualism, are all useful practices for ESL classes, they do not appear to differ much from what liberal educators have always been doing. The point here is that postmodern and poststructuralist thought has a view of history that locates our own histories and memories within complex discursive fields and sees stereotypes as

aspects of discourses embedded in texts and institutions. These cannot be easily approached, confronted, and dealt with as if histories and stereotypes were easily readable stories of truth and obfuscation.

Kanpol seems to talk too readily of "a sense of community" growing out of "similarity within differences" (p. 245), of students' stereotypes being challenged, of similarity being "tolerance, team effort, sharing" and differences being "likes and dislikes" (p. 246). He makes puzzling statements such as "teachers at all levels of education have the power not only to help students assimilate into mainstream culture; they can also use 'assimilation' as a social and political tool to transform consciousness by bringing into focus the similarities within differences" (p. 247). What I think is crucial in all this--and this is one of the problems with Habermas, whose faith in modernism Kanpol approvingly references--is that we need to understand appeals to similarity and consensus within the larger discursive structures that support them. A notion of similarity, therefore, based (it would seem) on an assumption of intersubjective understanding and common experience, needs to be understood in terms of the discursive structures that make such an assumption possible. Understanding, experience, consensus, or similarity are always mediated and produced through discourse.

In conclusion, I would like to suggest that while Kanpol has initiated an interesting area for debate and has rightly pointed to some shortcomings in my work, his theory of similarity within difference should at best be seen as one amongst many possible ways of establishing solidarity within a postmodern epistemology. For myself, I am still struggling with questions of how a principled postmodernism might work, of how we can understand ethical and political ways of pursuing a critical applied linguistics. As I have said, I retain this phrase as a heuristic that may be of help in engaging these issues; I do not want to put it forward as a theory or suggest that we all need to be doing principled postmodernism. And in doing reconstructive work, I think we need to be extremely cautious, to proceed tentatively, and to learn to listen. If new voices are to emerge, subjugated knowledges to be insurrected, we need to accept that things may be very messy, reflecting the "soupiness" of the world that has so often been disregarded by the disciplining effects of the social sciences. In his editorial to the inaugural edition of this journal, Antony Kunnan (1990) spoke of the "unsung melodies of applied linguistics" and a Bakhtinian notion of polyphonic voices. I think this may be a period when a certain

anarchistic polyphony might best suit applied linguistics before we regroup and talk too much of similarity or consensus.

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By the time this response is published, Alastair Pennycook should have finished his doctoral dissertation, *The Cultural Politics of Teaching English in the World* and be looking for a job. Having taught, read, and travelled widely, he is keen to find new and diverse worlds to explore.

CONFERENCE REPORT

Language Policy in Southern Africa: Perspectives From Three International Conferences

John Povey

University of California, Los Angeles

Decisions concerning language use in Africa are highly sensitive and fraught with explosive political and social potential because, among other things, Africa is extraordinarily multilingual. Joseph Greenberg¹ has calculated that half the known languages of the world are found on that one continent. Individual countries, like Nigeria or Cameroon, contain within them literally hundreds of languages, and no African country has the simplicity of monolingualism. In West and East Africa, the inevitable if reluctant solution for post-independence national unity has been to retain the colonial European language as the language of government and therefore of national unity. The positive convenience and utility of this language policy has until now tended to outweigh its negative imperial associations, but increasingly it is being challenged by the demand for mother tongue education. Nevertheless, even where resented the need for European languages, including English, remains.

Two countries, South West Africa/Namibia and the Republic of South Africa, were not part of the earlier historic winds of change that created most of the present African states. They came to independence belatedly, albeit in different guises, and are now being forced to confront the question of language choice. During the summer of 1991, universities in both these countries hosted conferences, inviting international specialists (in various fields) to air the options which should be considered by the politicians and decision-makers.

The first meeting was held in Windhoek, the capital of what used to be known as South West Africa but is now renamed

Namibia. A German colony in the late 19th century, evidence of Namibia's colonial history remains in its architecture, religion, dress, and language. When the Germans were defeated by South African forces during the 1914-1919 war, South Africa was given a supervising mandate over South West Africa by the League of Nations. Despite the official condemnation of South Africa by the United Nations, South African authority was retained until the modern-day complicated deal that linked the granting of Namibia's independence to the departure of Cuban forces from Angola. It was the South West African People's Organization (SWAPO) which took power in Namibia after the first national elections, and these are the leaders now exploring the language policy options for an independent Namibia.

The Department of Linguistics at the newly formed University of Namibia convened the conference under the title "Language Ecology in Africa." It became clear at the conference that "ecology" was intended to refer to the threatened indigenous languages that needed protection, like elephants and the rain forests. To that end there were several markedly specialized papers, such as "Prospects for the Future of Seyeyi" (a language spoken by 10,000 people in Botswana), "The Sub-Cluster of Tonga/Toka Languages: Subiya, Fwe, Totela, and Mbalan," "A Phonological History of Yeyi," "Dialects of Koekhoe, !Xuu and Zul'hoasi." A larger audience, however, attended the papers which addressed the more immediate and realistic difficulties confronting the Namibian government, whether by direct suggestion or by comparative reference to the experiences of other countries, such as Malawi, Uganda, Rwanda, Benin, Nigeria, and, more remotely, Papua New Guinea.

The problem of language policy facing Namibia derives from the early expressed determination of the SWAPO leadership, when still in exile, that English should be the language of the new state when they took power. This decision was endorsed by the United Nations, despite the policy having little to say concerning the crucial issue of the potential roles that African languages might play in an independent Namibia and despite it having dangerously arbitrary dimensions. As Theo Du Plessis of the Urban Foundation put it, "the document prepared during the years of the liberation struggle on future language policy . . . was never contested" (Du Plessis, 1991)

As many of the readers may know, this author has made a career out of advocating the advantages of just such a policy--of asserting the primacy of English as the vehicle for economic

progress--from experiences in countries as diverse as Togo and Somalia. Prior to arriving at the conference he had prepared his usual peroration endorsing the Priority of English Principle expressed by SWAPO. But on this occasion his presentation (Povey, 1991) lacked his usual missionary fervor, for there proved to be two snags: another fully effective national and regional language already existed, and, unfortunately, virtually no one in Namibia spoke English!

Afrikaans, though tainted with its South African association, was almost universally spoken as a first or second language in Namibia, and, for seventy years, the entire administration of government had been effectively conducted in that language. Residual German was suppressed, reduced, as one conference paper lamented, to such marginalia as "The Lost Umlaut." In line with the new English-only policy of the independent government, however, Afrikaans TV, radio, and newspapers were abolished by blatant acts of brutal linguistic disenfranchisement.

At the conference, this violence was challenged by V. Peeters, of the Belgian Foundation for the Study of Plural Societies. He was restrained from giving his paper in Afrikaans and thus was able to claim linguistic oppression and a prejudgment of the policy question, though given the international makeup of the audience his immediate claim was somewhat tendentious. Nevertheless, philosophically Peeters's views remained both passionate and challenging with global and local implications. In one extraordinary excoriation he declared that "monolingualism is utopia, though all governments prefer and seek it, refusing to believe it is impossible." Peeters then went on to argue that only law can aid minority groups because majority democracy constitutes as powerful a threat to them as totalitarianism. He advanced the provocative paradox that, for minorities, "Freedom oppresses. The law sets free" (Peeters, 1991).

The next stage of debate at the conference addressed the question that if English were to be imposed, what form should it take? George Wilcox of the United States Information Service, who luckily escaped being called out on the charge of sexism, reported his incomprehension of his (female) secretary's UK-style complaint that she had "a ladder in her tights." He saw in this anecdote a basis for providing a series of helpful parallel Americanisms ('a run in her panty-hose?') that might be added to Namibian vocabularies (Wilcox, 1991).

Several senior, usually European, language policy advisors to the Namibian Ministry of Education spoke of the practical hurdles that they were encountering. R. L. Trewby described the difficulties of implementing educational policies "where decisions are made by government officials or politicians" (Trewby, 1991). These working administrators sat through the conference presentations doubtless in the unfulfilled hope that they would receive illuminating and practical advice, but academics, as usual, preferred to delineate problems and to call for further research!

This author's attendance at the Namibia conference was abbreviated by bizarre circumstance. Roughly roused from early morning slumber by agents of the United States government, he was evicted from his room to make space for Vice-President Dan Quayle, who was arriving on a "fact-finding" mission. Confronted by a night on the sidewalk, this author preferred to depart for a second conference in Cape Town, South Africa. But, by doing so, he was unable to attend two important scheduled activities. One was an event organized by the American Embassy: participants were linked by satellite to discuss "A Draft Language Policy of Namibia" with Carol Myers Scotton in Washington, DC. More lamentably, the author missed the second event: an organized tour of the Windhoek breweries with its promise of ample free samples.

The South African conference, "Democratic Approaches to Language Planning and Standardisation," assembled in the beautiful mountain garden setting of the University of Cape Town. The "ecology" theme of the previous conference had sensitized one to the innuendoes of an agenda hidden by semantics, but one wondered about the relation between language policy and democracy, especially after Dr. Peeters's impassioned warning that democracy may well impose language tyranny.

Unlike SWAPO, the leaders of the African National Congress (ANC) in South Africa have not declared a language preference, as November (1991) recently confirmed. This avoidance has probably resulted because most members of the ANC are Xhosa speakers, while Zulu is the majority indigenous language. Nevertheless, the conference program was printed in three languages: English, Afrikaans, and Xhosa, the latter the predominating indigenous language in the Cape area.

The organization of this meeting was deliberately activist, for it was quite specifically declared in the conference program that "this conference is part of a national initiative to involve community, labour and professional organizations in the debate over a language

policy for a democratic South Africa." (One notes that linguists were not specifically included in the argument!) Appropriately, the three North American participants, Arthur J. More, Bronwyn Norton Peirce, and Barbara Toye Welsh, were all Canadians involved with "Native Language Programs" in British Columbia and Ontario.

There were few plenary presentations. Attendees were instead allocated to twenty workshops where they were required to discuss specific issues and make reports and recommendations for the policy options facing South Africa as it moves towards its new definition of independence. The author joined the group led by a graduate from UCLA's TESL program, Qedusizi Buthelezi, of the University of Witwatersrand in Johannesburg, because it was the only workshop which specifically included the word "English" in its title, though one suspected that the workshop entitled "Language Policy and Gender Sensitivity" was more likely to derive from American than African perturbations. The key question we were required to contest in our workshop was "How can we ensure that English is accessible to all, rather than to the exclusive reserve of the elite?" The initially undefined term "democracy" was now being clearly measured as majority. Certainly the word was much bandied about in the various session titles, including the one this author attended, "English in a Democratic South Africa."

Ironically, the link between English and democracy was precisely reversed in the Namibian situation. There, English was to be imposed despotically rather than democratically. In South Africa, English has a long indigenous history. It was first introduced in 1815 as a deliberate counter to Afrikaans. After so many years it should have taken root and become culturally neutral, as it has in Nigeria. There is, after all, even a lengthy specialized dictionary of South African English (Branford, 1987). At this meeting, however, it became clear that English was perceived as potentially oppressive because English was, as many expressed it, still a colonial language which carried with it "the baggage of imperialism," and because English was guilty of having the potential to be a juggernaut, powerful enough to eliminate and replace the legitimate function of African languages. That had been a familiar enough view in West Africa, but it seemed surprising in South Africa where English has had such a long history and had consistently been the language of anti-apartheid radicalism.

One paper recognized the conflict by asking whether if English was "the de facto language of the trade union's

administration" (which was most certainly true) that such uniform usage would succeed in "disempowering the working class as a whole." One view, that the inevitable future shift of political and economic power from white to black might make English less essential, was a dream pursued with disastrous lack of success in Tanzania. But several counters to this generalized anti-English resentment were advanced. It was pointed out, for instance, that if one considered English usage to be measured by "whose variety," rather than "which variety," its usage could be legitimized, that local usage could reverse the common practice of asserting linguistic principles from above and "filter up from grass roots to the policy makers," and that regional varieties of English might eliminate its threatening elitist aspect and democratize English. In such a context, it was argued, English could become "the property of the people," people, of course, being the unassailable reference to democracy. The practice, it was concluded, would result in a drastically limited international utility, but that appeared to be an acceptable price to pay for linguistic democracy.

The difficulty in such a position, however, is the inevitable necessity of English and, generally, the unlikelihood that any indigenous language can serve as a single unifying social force or in any full-service function. In most multilingual contexts, the greater the multilingualism the more the political penalties. For South Africa, a most subtle linguistic argument was put forward to offset the complexity in a brilliant and persuasive lecture by Neil Alexander of the National Language Project at the University of Cape Town. Alexander argued that the indigenous language situation in South Africa was not comparable to circumstances in other countries. It had none of the astounding complexities of Cameroon, for instance, where four main language groups existed. Democratization, now defined as meaning "making a place for African languages," might be possible, Alexander asserted, if the various South African tongues could be reconciled, since with minor exceptions they all had the underlying connection of being Bantu in origin. Alexander also asserted that such "harmonisation" was a practical proposition for two language groups: Nguni (including Xhosa, Zulu, Swazi, and Ndebele) and Sotho (including Tswana, South Sotho, and North Sotho). Alexander's research indicated that "there is no theoretical or intrinsically linguistic reason why a project to harmonise and modernise . . . cannot be undertaken." While this prospect would certainly have revolutionary social impact on South Africa, Alexander thinks that in the long-term the process might take

"one or two generations" to be successful (Alexander, 1991). Indeed, the reconciliation of closely related languages would eventually reduce apparent multilingualism to an educationally manageable bilingual situation and perhaps become a pattern for other African countries.

After the Cape Town conference, the author returned via Johannesburg, to visit the University of Witwatersrand, an alma mater. It was significant to see how yet another institution had learned that serious work in language studies depended on a separation from the formal Department of English with its exclusive focus on literature. A new "English" department with a new chair was recently established whose mission is introducing not only new courses in the study of English language but also a new attitude (on this excellent but traditional campus) towards the essential social aspects of English studies. These changes will hopefully create a balance between the desires of the activists and the interests of the academics. That, in itself, would constitute a healthy and productive intellectual tension at Witwatersrand.

The author's stopover in Nairobi, Kenya should have been a time for R and R, but the local newspaper headlines informed readers that "Dons Grapple with the Pitfalls of Language," so it was on to another conference! At Moi University, the theme was "The Creative Use of Language in a Multilingual Society." This serendipitous opportunity to attend a meeting in another region of Africa provided a fascinating contrast to the South African fretfulness about English and "democracy," for the debate in Kenya turned on other issues.

Some years ago, for political reasons, Kenya declared Swahili to be the national language. This policy did not greatly interfere with the inevitable acceptance of English as a communicative vehicle within the society, but common usage ultimately engendered various localisms and variants of English expression. The concern voiced at the Moi conference, however, was not the desire for indigenization that had motivated the South African debate. Quite the contrary: Kendo Sure, of the University of Nairobi, presented a carefully researched paper which lamented "falling standards" of English, by which he meant the gradual loss of standardized English competencies (Sure, 1991). Sure spoke of "factors impeding the acquisition and use of English" and even took the controversial position that Africans make "grammatical mistakes." Chris Wanjala, also of the University of Nairobi, offered an illustrative anecdote in support of this view (Wanjala,

1991). Recently he had been in England conducting an interview, and he required an interpreter as intermediary, though he is a highly regarded professor of English!

The conclusion drawn at the Nairobi conference was as logical as it was surprising: "English should be written and spoken in such a way that there is communication between Kenyans and the international community." This view seems an inescapable aim if English remains the global lingua franca. And if English can bring a country like Kenya into the global mainstream, does that make such a policy less "democratic?"

After Nairobi, your author was clearly conferenced out, but he was glad to have been at an additional meeting in still another African country, conducted with such anxious vehemence, that provided still further evidence of the desperately important linguistic questions that continue to provoke Africa: What language shall be used, and what are the consequences to be suffered from accepting any of the choices available? It almost puts the debates over Californian bilingualism into simpler perspective.

NOTES

- ¹ Professor Greenberg is at Stanford University's Department of Linguistics.

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John Povey, Professor Emeritus in the Department of TESL & Applied Linguistics, was educated in South Africa before coming to Michigan State University to complete a doctorate in African literature. After his appointment at UCLA in 1964, he taught courses both in literature and its relationship to ESL programs and in language policy and planning. His research has been primarily focused on Africa, where he has worked on projects in Somalia, Togo, Nigeria, Ghana, and Zimbabwe. In addition, for more than twenty years he has edited *African Arts*, an international journal.

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ERRATA

In Volume 2, Number 1 (June 1991)

Jarvis (1991) was misquoted in the last sentence of the second paragraph on page 79 of Leo van Lier's essay, "Doing Applied Linguistics: Towards a Theory of Practice." The text should have read as follows:

Jarvis (1991) argues that, whereas research is designed "to generate knowledge--to come to understand," the purpose of a teacher's research, or action research, is "to solve a problem--to make something work" (p. 302).

The Editors apologize for this oversight.

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Los Angeles, CA 90024-1531
USA

INFORMATION FOR CONTRIBUTORS

Issues in Applied Linguistics (IAL) is a refereed scholarly journal published by the graduate students of the UCLA Department of TESL & Applied Linguistics. The Editors encourage submissions of previously unpublished manuscripts from students, faculty, and independent researchers in the broad areas of language acquisition, language analysis, language education, language testing, language use, and research methodology.

IAL looks favorably on interesting small-scale studies as well as large-scale studies, is interested in publishing new departures as well as underrepresented areas of applied linguistics research, and encourages submissions from countries other than the U.S. and from nonnative speakers of English.

Issues in Applied Linguistics invites submissions in the following categories:

Full-length articles: Authors should embed their reports of research in an explicit discussion of at least one issue in applied linguistics. Manuscripts should be 10-30 double-spaced pages, including tables which must appear in their proper place in the text. The author's name should appear on a separate page only, along with a 50-word biostatement; the cover page should include a title and a 200-word abstract. Submit four copies to the Editor.

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All submissions to *IAL* should follow the publication guidelines of the APA (American Psychological Association) and should not be under consideration for publication elsewhere. Manuscripts will not be returned, so authors should keep a copy.

All manuscripts are evaluated by a minimum of two reviewers, at least one being a faculty member. Rarely is a manuscript accepted for publication without undergoing a revision process. The Editor reserves the right to make editorial changes for economy and clarity of expression.

All submissions should be accompanied by all authors' full names, affiliations, mailing addresses, telephone numbers, and electronic mail addresses if possible.

Published manuscript format specifications: All manuscripts *accepted for publication* must be submitted on a *non-returnable* diskette (authors should keep a back-up copy) formatted in Microsoft Word 4.0 for the Macintosh. This means that authors will be responsible for converting their manuscript files from other wordprocessing formats to *IAL's* format if necessary. Upon acceptance for publication, further technical specifications will be forwarded to the author(s).

